1 EMERGENCY

1.1 TOXICOLOGY/ ANTIDOTES

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Acetylcysteine 200 mg/ml Injection	LP/SH FPD KT	A*		Antidote for paracetamol poisoning.	Diluted with Dextrose 5% and infused IV. Initially, 150 mg/kg IV in 200 ml over 60 minutes, then 50 mg/kg IV in 500 ml over 4 hours, followed by 100 mg/kg IV in 1000 ml over 16 hours. Total dose: 300mg/kg in 20 hours.
Antivenene Cobra Injection	APPL FPD KT *A&E	B		Treatment of patients who exhibit manifestations of systemic envenoming following a bite by Cobra (Naja kaouthia).	Initial dose of 100ml of reconstituted antivenene given by slow intravenous infusion (2ml/min). Subsequent dose can be given every 12 hours according to the clinical symptoms. As product may differ from batches and manufacturer, it is strongly recommended to refer to the product insert on dosing recommendation.
Calcium Polystyrene Sulphonate Powder	LP/KKM SS	A*, A/KK	**Kalimate**	PRESCRIBER CATEGORY A*: Hyperkalemia resulting from acute or chronic renal failure PRESCRIBER CATEGORY A/KK: For asymptomatic mild hyperkalemia without ECG changes	ADULT: 15 – 30g daily in 2-3 divided doses. Each dose should be suspended in 30 – 50ml of water and administered orally at least 3 hours before or 3 hours after other oral medications. CHILD: 0.125-0.25g/kg orally or rectally 4 times per day (max: 10g/dose). NEONATE: 0.125-0.25g/kg rectally 4 times/day. Evacuate the resin 8-12 hours after the last dose with glycerine enema. (Oral route is CONTRAINDICATED in neonates). Dosing is individualised and according to product insert/protocol
Charcoal, Activated 50 g Granules	LP/SH FPD KT	A		Emergency treatment of acute oral poisoning and drug overdose.	ADULT and CHILD 12 years and above: Acute poisoning: 50 - 100 g in suspension. Severe poisoning: 50 - 100 g as an initial dose followed by 20 g every 4 - 6 hours. CHILD up to 12 years: 1 g/kg/dose (Maximum 50g/dose). Dose may be repeated every 4 to 6 hours as needed. *Dosing is individualised and according to product insert/ protocol.*
Flumazenil 0.1 mg/ml Injection	LP/KKM SS	B		i) Diagnosis and/or management of benzodiazepine overdose due to self-poisoning or accidental overdose. ii) Reversal of sedation following anaesthesia with benzodiazepine.	i) Initial, 0.2 mg IV over 30 seconds; if desired level of consciousness not obtained after an additional 30 seconds, give dose of 0.3 mg IV over 30 seconds; further doses of 0.5 mg IV over 30 seconds may be given at 1-minutes intervals if needed to maximum total dose of 3 mg; patients with only partial response to 3 mg may require additional slow titration to a total dose of 5 mg; if no response 5 minutes after receiving total dose of 5 mg, overdose is unlikely to be benzodiazepine and further treatment with flumazenil will not help. ii) 0.2 mg IV over 15 seconds; if desired level of consciousness is not obtained after waiting 45 seconds, a second dose of 0.2 mg IV may be given and repeated at 60-seconds intervals as needed (up to a maximum of 4 additional times) to a maximum total dose of 1 mg; most patients respond to doses of 0.6 to 1 mg; in the event of resedation, repeated doses may be given at 20-minutes intervals if needed; for repeat treatment, no more than 1 mg (given as 0.5 mg/minute) should be given at any one time and no more than 3 mg should be given in any one hour.
Fuller's Earth Powder	LP/SH FPD KT	C		Adsorbent in pesticide poisoning.	Adult: 100-150g every 2-4 hours. Child: 1-2g/kg. (100g of Fuller's Earth is mixed with 200ml water. Repeat until Fuller's Earth is seen in stool (normally between 4-6 hours).
Hemato Polyvalent Snake Antivenom Injection	APPL FPD KT	B		Passive immunisation against poisonous of a range of haematotoxic snakebites or neurotoxic snakebites, based on the type of snake identified.	For initial does, at least 20mL of reconstituted serum should be given by slow intravenous infusion (not more than 1mL/minute). If symptoms still persist, the second dose should be repeated 2 hours or even earlier after the initial dose. The further dose should be repeated every 6 hours according to the clinical symptoms. Administration: Draw 10mL of the sterile water for injection to the freeze-dried antivenin, shake well to dissolve the contents until the serum became clear colourless or pale yellow liquid, ready for administration.
Methylene Blue 0.5% Injection	LP/SH FPD KT *Anaes *ENT	B		i) For treatment of idiopathic and drug-induced methaemoglobinemia ii) As dye in diagnostic procedures	i) Adult and children: 1 to 2 mg/kg IV over 5 minutes. This dosage can be repeated if necessary after one hour. ii) A dose of 5 mg/kg diluted in 500 mL of glucose 5% infused over 1 hour has been used successfully to stain and identify the parathyroid glands. Dosing is individualised and according to product insert/protocol.

Naloxone HCl 0.4 mg/ml Injection	APPL SS	B		For the complete/partial reversal of narcotic depression including respiratory depression induced by opioids such as natural and synthetic narcotics. Diagnosis of suspected acute opioids overdosage.	Initially 0.4 - 2 mg IV repeated at intervals of 2 - 3 minutes according to patient's needs.
Naltrexone HCl 50 mg Tablet	APPL FPL KT	A		Adjunct in relapse prevention treatment in detoxified formerly opioid-dependant patients.	Initial 25 mg may be increased to 50 mg. Maintenance : 350 mg weekly; administered as 50 mg daily. Dosing interval may be lengthened to improve compliance; 100 mg on alternate days or 150 mg every third day.
Neuro Polyvalent Snake Antivenom Injection	APPL FPD KT	B		Passive immunisation against poisonous of a range of haematotoxic snakebites neurotoxic snakebites, based on the type of snake identified.	For initial dose, at least 20mL of reconstituted serum should be given by slow intravenous infusion (not more than 1mL/minute). If symptoms still persist, the second dose should be repeated 2 hours or even earlier after the initial dose. The further dose should be repeated every 6 hours according to the clinical symptoms. Administration: Draw 10mL of the sterile water for injection to the freeze-dried antivenin, shake well to dissolve the contents until the serum became clear colourless or pale yellow liquid, ready for administration.
Pralidoxime 25 mg/ml Injection	APPL FPD KT	B		Antidote in the treatment of organophosphorus insecticide poisoning and in the control of overdosage by anticholinergic drugs used in the treatment of myaesthenia gravis.	Adult: Used in combination with atropine. Admin atropine via IM/IV inj and repeat as needed until patient shows signs of atropine toxicity. Maintain atropinisation for at least 48 hr. As soon as the effects of atropine are observed, 1-2 g of pralidoxime (chloride, iodide or mesilate) may be given via IM/IV inj. Repeat dose after 1 hr, then every 8-12 hr, if necessary. In severe poisoning, continuous infusion of 200-500 mg/hr may be given, titrated according to response. Alternatively, pralidoxime chloride may be given at an initial dose of 30 mg/kg via IV infusion over 20 minutes or IV inj over 5 minutes, followed by IV infusion at 8 mg/kg/hr. Max: 12 g/24 hr. Child: As mesilate: 20-60 mg/kg. Renal impairment: Dose adjustment may be required.
Protamine Sulphate 10 mg/ml Injection	LP/SH FPD KT	B		Heparin overdose and following cardiac or arterial surgery or dialysis procedures when required to neutralize the effects of heparin administered during extracorporeal circulation.	5 ml slow IV injected over 10 minutes. If administered within 15 minutes of heparin dose, 1 mg will neutralise approximately 100 units of heparin. If longer time has elapsed, less protamine is required. Not more than 50 mg should be injected at any one time. The dose is dependent on the amount and type of heparin to be neutralised, its route of administration and the time elapsed since it was last given and blood coagulation studies.

2 GASTRO-INTESTINAL

2.1 DYSPEPSIA

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Magnesium Trisilicate Tablet	APPL FPL KT	C	**Gelusil**	Heartburn, dyspepsia.	ADULT 1-2 tablet to be chewed up to 6 times a day before meals. CHILD over 6 years one tablet to be taken 3-4 times a day.
Magnesium Trisilicate Mixture	LP/KKM SS	C	**MMT**	Heartburn, dyspepsia.	ADULT children over 12 years: 10-20 ml 3 times daily or as required. CHILD: 5-11 years: 5-10 ml 3 times a day or as required.

2.2 ANTISPASMODICS AND MEDICINES ALTERING GUT MOTILITY

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Domperidone 1 mg/ml Suspension	LP/SH FPL KT *Paediatric *Surgical (*Named-Patient Basis*)	B		Nausea, vomiting, dyspepsia, gastro-esophageal reflux.	Adults and adolescents ≥ 12 years of age and weighing ≥ 35kg & children < 12 years of age and weighing ≥ 35kg: 10ml three to four times per day. Maximum dose: 40mg/day. Adults and adolescents (≥ 12 years of age) weighing < 35kg: 0.25mg/kg three to four times per day. Maximum dose: 35mg/day.
Hyoscine N-Butylbromide 1 mg/ml Liquid	LP/SH FP KT	B		Gastrointestinal tract and genito-urinary tract spasm, dyskinesia of the biliary system.	ADULT 10-20mg, 3-4 times a day. CHILD 6-12 years old: 10mg 3 times a day.
Hyoscine N-Butylbromide 10 mg Tablet	APPL SS	C		Gastrointestinal tract and genito-urinary tract spasm, dyskinesia of the biliary system.	ADULT 10-20mg, 3-4 times a day. CHILD 6-12 years old: 10mg 3 times a day.
Hyoscine N-Butylbromide 20 mg/ml Injection	APPL SS	B		Gastrointestinal tract and genito-urinary tract spasm, dyskinesia of the biliary system.	ADULT: 20 mg IM / IV repeated after 30 min if needed. Max 100 mg daily. Not recommended for CHILD below 12 years. *Dosing is individualised and according to product insert/ protocol.*

Itopride HCL 50 mg Tablet	LP/SH FPL KT *Surgical	A*		Treatment of gastrointestinal symptoms of functional, nonulcer dyspepsia (chronic gastritis) i.e sensation of bloating, early satiety, upper abdominal pain or discomfort, anorexia, heartburn, nausea and vomiting.	50 mg 3 times daily before meal.

2.3 ULCER-HEALING MEDICINES

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Esomeprazole 40 mg Tablet	APPL FPL KT *Medical (Dr. Hidayah) *Surgical *Anaes (inpatient-short term)	A		i) Gastro-oesophageal reflux disease ii) H. pylori eradication. *Prescribing Restrictions* - First-line therapy for patients on Ryle's tube or unable to tolerate oral therapy - Second-line therapy for patients who are not suitable to take or did not respond well to pantoprazole despite optimal duration of treatment.	i) 20 mg daily for 4-8 weeks ii) 40 mg daily for 10 days in combination of amoxicillin 1 g bd or clarithromycin 500 mg bd.
Esomeprazole 40 mg Injection	APPL SS *Medical (Dr. Hidayah) *Surgical	A*		i) Acute erosive/ ulcerative oesophagitis ii) Non-variceal upper gastrointestinal bleeding	i) 20 or 40 mg once daily for 2-5 days ii) 80 mg by IV bolus followed by 8 mg/hr infusion for 72 hours.
Omeprazole 20 mg Capsule	APPL SS	A/KK		Only for: i) Reflux oesophagitis ii) For eradication of Helicobacter Pylori infection iii) Benign peptic ulcer not responding to conventional therapy iv) Zollinger-Ellison Syndrome.	i) 20 - 80 mg 1 - 2 times daily up to 8 - 12 weeks ii) 20 mg twice daily in combination with any of the 2 antibiotics (clarithromycin 500 mg twice daily, amoxicillin 1 g twice daily or metronidazole 400 mg twice daily) for 1 - 2 weeks iii) 20 mg once daily for 4 - 6 weeks iv) ADULT: 20 - 120 mg once daily adjusted according to the patient's response. CHILD 0.4 - 0.8 mg/kg/day.
Omeprazole 40 mg Injection	LP/KKM SS	A*		i) Reflux oesophagitis, eradication of H. Pylori infection, benign peptic ulcer not responding to conventional therapy, Zollinger-Ellison Syndrome ii) Endoscopically confirmed peptic ulcer.	i) 40 mg IV once dly when oral therapy is inappropriate. ii) 40 - 160 mg IV in single or divided doses.
Pantoprazole 40 mg Tablet	APPL SS	B		i) Helicobacter pylori eradication ii) Peptic ulcer disease iii) Erosive and non-erosive reflux oesophagitis (GERD & NERD) iv) Zollinger-Ellison Syndrome v) Prevention of NSAID induced gastropathy.	i) 40 mg twice daily in combination with any of the 2 antibiotics (Clarithromycin 500 mg twice daily, Amoxicillin 1 g twice daily or Metronidazole 400 mg twice daily) for 1-2 weeks ii) 40 mg daily for 2 - 4 weeks iii) 20 - 40 mg daily on morning for 4 weeks iv) Initially 80 mg daily, dose can be titrated up or down as needed. v) 20 mg daily. CHILD not recommended.
Pantoprazole 40 mg Injection	LP/KKM SS	A/KK		Short term use for symptomatic improvement and healing of gastrointestinal diseases which require a reduction in acid secretion: • Duodenal ulcer • Gastric ulcer • Moderate and severe reflux esophagitis • Zollinger-Ellison-Syndrome and other pathological hypersecretory conditions.	40 mg bd until oral administration can be resumed. CHILD not recommended.
Ranitidine 25 mg/ml Injection	LP/SH FPD KT *A&E (Floor Stock)	B		i) Benign gastric/ duodenal ulceration, reflux oesophagitis, Zollinger Ellison Syndrome ii) Stress ulcer prophylaxis in post-operative & high risk patients.	i) ADULT: Slow IV injection of 50 mg diluted to 20 ml and given over at least 2 minutes. May be repeated every 6-8 hours or IV infusion at rate of 25 mg/hour for 2 hours, may be repeated at 6-8 hours intervals or IM. CHILD: 1 mg/kg/dose 6-8 hourly. ii) Initial slow IV injection of 50 mg, then continuous infusion of 125-250 mcg/kg/hour.
Sucralfate 1g Tablet	LP/SH FPL KT	A		i) Benign gastric and duodenal ulceration ii) Stress ulcer prophylaxis	i) 2 g twice daily or 1 g 4 times daily for 4-6 weeks or in resistant cases up to 12 weeks (maximum 8 g daily) ii) 1 g 6 times daily (maximum 8 g daily). CHILD not recommended

2.4 ANTIDIARRHOEALS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE

Diphenoxylate HCl 2.5 mg with Atropine Sulphate 0.025 mg Tablet	APPL SS	B	**Lomotil**	Symptomatic treatment of acute and chronic diarrhoea	ADULT: 2 tablets 4 times daily, later reduced when diarrhoea is controlled. Maintenance: 2 tablets once daily as needed (Max: 8 tablets daily)
Loperamide 2 mg Capsule	LP/SH FPL KT *Surgical	B		i. Adjunct to rehydration in: a. acute diarrhea in adult; and b. chronic diarrhea in adult ii. In patients with an ileostomy, it can be used to reduce the number and volume of stools and to harden their consistency	6 – 8 mg per day up to max. of 16mg per day Dosing is individualised and according to product insert / protocol

2.5 LAXATIVES

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Bisacodyl 10 mg Suppository	APPL SS	C		i) Constipation ii) Bowel preparation for radiological procedures and surgery.	i) ADULT and CHILD over 10 years: 10 mg per rectal, CHILD (4-10 years) :5 mg per rectal ii) ADULT 10-20 mg, CHILD (4-10 years): 5 mg the following morning before procedures insert rectally.
Bisacodyl 5 mg Tablet	LP/SH FPL KT	C		i) Constipation ii) Bowel preparation for radiological procedures and surgery.	i) ADULT and CHILD over 10 years 5-10 mg, CHILD (4-10 years) 5 mg. To be taken at night for effect on the following morning ii) ADULT and CHLID (over 10 years) :10 mg in the morning and 10mg in the evening the day before procedures, CHILD (4-10 years) :5 mg the night before procedures.
Glycerin 25 % & Sodium Chloride 15 % Enema	APPL SS *Inpatient only	C+	**Ravin Enema**	Constipation.	1 enema as required.
Lactulose 3.35 g/5 ml Liquid	LP/KKM SS	C		i) Constipation ii) Hepatic encephalopathy.	i) ADULT 15-45 ml daily in 1-2 divided doses adjusted to patient's need. Maintenance dose:15-30ml daily in 1-2 divided doses. CHILD 0.5 ml/kg/dose once or twice daily ii) ADULT: 30-45 ml 2-4 times daily, dose adjusted to produce 2-3 soft stools daily. CHILD 1 ml/kg/dose 3-4 times daily.
Liquid Paraffin	APPL SS	C		Constipation.	ADULT 10-30 ml daily at night. CHILD: not recommended.
Polyethylene Glycol/ Macrogol 4000 Powder	APPL SS	A	Fortrans	Bowel cleasing prior to colonoscopy, radiological examination or colonic surgery. Suitable for pateint with heart failure or renal failure.	1 sachet dissolved in 1 L of water and to be consumed within 1 hour. Usual dose: 3-4 L of oral solution are required. When morning surgery is planned, the oral solution is given in the late afternoon the day prior. If surgery is planned in afternoon, the oral solution should be given on the same day for ingestion to be completed three hours before surgery.
Sodium Biphosphate 16%, Sodium Phosphate 6% Rectal Solution	LP/SH FPD KT	A	Fleet Enema	Bowel cleansing before colonic surgery, colonoscopy, or radiological examination to ensure the bowel is free of solid contents. It is not to be used for treatment of constipation.	ADULT 133 ml (1 bottle) administered rectally. CHILD more than 2 years half the adult dose (66.6 ml).

2.6 LOCAL PREPARATIONS FOR ANAL AND RECTAL DISORDERS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Diltiazem Cream 2%	LP/SH FP KT	GALENICAL PRODUCT		Promote the healing and reduce symptoms of an anal fissure.	Apply a small amount to finger (approximately 2.5cm) and place the cream just inside the anus, at the entrance. A finger covering, such as cling film or a disposable glove may be used to apply the ointment. Use the cream twice a day every day (morning and evening) for 2 months.
Glyceryl Trinitrate 0.2% Ointment	LP/SH FP KT	GALENICAL PRODUCT	**GTN**	Promote the healing and reduce symptoms of an anal fissure.	Apply a small amount to finger (approximately 2.5cm) and place the cream just inside the anus, at the entrance. A finger covering, such as cling film or a disposable glove may be used to apply the ointment. Use the cream twice a day every day (morning and evening) for up to 2 months if necessary.
Zinc Oxide, Benzyl Benzoate and Balsam Peru Suppository	APPL FPL KT	C	**Anusol Supp**	For relief of pruritus, burning and soreness in patients with haemorrhoids and perianal conditions.	Insert 1 suppository night and morning after bowel movements; do not use for longer than 7 days OR please refer to the product insert.

2.7 MEDICINES AFFECTING INTESTINAL SECRETIONS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Ursodeoxycholic Acid 250 mg Capsule	LP/KKM FPL KT *Surgical	A	**Ursofalk**	Cholestatic liver diseases (eg. primary biliary cholangitis, primary cholangitis etc.)	10-15 mg/kg daily in 2 to 3 divided doses Dosing is individualised based on body weight and according to product insert/protocol

2.8 ANTIEMETIC

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Granisetron HCl 1mg/ml Injection	LP/SH FPD KT *Surgical	A		i) Prevention and treatment of nausea and vomiting associated with chemotherapy and radiotherapy ii) Post-operative nausea and vomiting	i) ADULT 1-3 mg as an IV bolus not not less than 30 seconds; maximum 9 mg/day. CHILD over 2 years; single dose of 10-40 mcg/kg as an IV infusion; maximum 3 mg/day ii) ADULT 1 mg by slow IV injection over 30 seconds prior to induction of anaesthesia
Meclozine HCl 25 mg & Pyridoxine 50 mg Tablet	LP/SH FPL KT	B	**Veloxin**	Nausea & vomiting of pregnancy.	Optimum dosing: 1 to 2 tablets OD. Maximum dosing: 4 tablets/day.
Metoclopramide HCl 10 mg Tablet	LP/SH SS	B		Use in adults for: i) Prevention of delayed chemotherapy induced nausea and vomiting (CINV) ii) Prevention of radiotherapy induced nausea and vomiting (RINV) iii) Symptomatic treatment of nausea and vomiting, including acute migraine induced nausea and vomiting Use in children aged 1-18 years for: i) Prevention of delayed chemotherapy induced nausea and vomiting (CINV) as a second line option	ADULT The recommended single dose is 10mg, repeated up to three times daily. The maximum recommended daily dose is 30mg or 0.5mg/kg body weight. The maximum recommended treatment duration is 5 days. Prevention of delayed CINV (children aged 1-18 years): The recommended dose is 0.1-0.5mg/kg body weight, repeated up to three times daily by oral route. The maximum dose in 24 hours is 0.5mg/kg body weight. CHILD age 1-3 years old (body weight 10-14kg): 1mg TDS, 3-5 years old (body weight 15-19kg): 2mg TDS, 5-9 years old (body weight 20-29kg): 2.5mg TDS, 9-18 years old (body weight 30-60kg): 5mg TDS, 15-18 years old (body weight > 60kg): 10mg TDS. *Tablets are not suitable for use in children weighing less than 30kg . Other pharmaceutical forms may be more appropriate for administration to this population.*
Metoclopramide HCl 5 mg/ml Injection	LP/KKM SS	B		Use in adults for: i) Prevention of post-operative nausea and vomiting ii) Symptomatic treatment of nausea and vomiting, including nausea and vomiting induced by migraine attacks iii) Prevention of radiotherapy-induced nausea and vomiting Use in children aged 1 to 18 years for: i) Prevention of delayed chemotherapy-induced nausea and vomiting as a second-line option ii) Prevention of post-operative nausea and vomiting as a second-line option	All indications (adult): A single 10mg dose is recommended for the prevention of post-operative nausea and vomiting. The recommended dose for the symptomatic treatment of nausea and vomiting, including nausea and vomiting induced by migraine attacks and for the prevention of radiotherapy-induced nausea and vomiting is 10mg per dose, 1 to 3 times daily. The maximum recommended daily dose is 30mg or 0.5mg/kg. Treatment duration when administering by injection should be as short as possible and a switch to administration via oral or rectal route should be instituted as quickly as possible. All indications (children aged 1 to 18 years of age) The recommended dosage is 0.1 to 0.15mg/kg, 1 to 3 times daily, by intravenous route. The maximum daily dose is 0.5mg/kg. Dosing table: CHILD age 1-3 years old (body weight 10-14kg): 1mg TDS, 3-5 years old (body weight 15-19kg): 2mg TDS, 5-9 years old (body weight 20-29kg): 2.5mg TDS, 9-18 years old (body weight 30-60kg): 5mg TDS, 15-18 years old (body weight > 60kg): 10mg TDS. For the prevention of delayed CINV, the maximum treatment duration is 5 days. For the prevention of post-operative nausea and vomiting, the maximum treatment duration is 48 hours.
Metoclopramide HCL 1 mg/ml Syrup	LP/SH FP KT	B		Use in adults for: i) Prevention of delayed chemotherapy induced nausea and vomiting (CINV) ii) Prevention of radiotherapy induced nausea and vomiting (RINV) iii) Symptomatic treatment of nausea and vomiting, including acute migraine induced nausea and vomiting Use in children aged 1-18 years for: i) Prevention of delayed chemotherapy induced nausea and vomiting (CINV) as a second line option	Adult: the recommended single dose is 10mg, repeated up to three times daily. The maximum recommended daily dose is 30mg or 0.5mg/kg body weight. The maximum recommended treatment duration is 5 days. Prevention of delayed CINV (children aged 1-18 years): The recommended dose is 0.1-0.5mg/kg body weight, repeated up to three times daily by oral route. The maximum dose in 24 hours is 0.5mg/kg body weight. Dosing table CHILD age 1-3 years old (body weight 10-14kg): 1mg TDS, 3-5 years old (body weight 15-19kg): 2mg TDS, 5-9 years old (body weight 20-29kg): 2.5mg TDS, 9-18 years old (body weight 30-60kg): 5mg TDS, 15-18 years old (body weight > 60kg): 10mg TDS. Tablets are not suitable for use in children weighing less than 30kg. Other pharmaceutical forms may be more appropriate for administration to this population.

Ondansetron 2 mg/ml Injection	APPL FPD KT *Medical (Dr. Hidayah) *Anaes	A		i) Prevention of nausea & vomiting induced by chemotherapy & radiotherapy ii) Postoperative nausea & vomiting.	i) 8 mg given by IV infusion over 15 minutes or by IM immediately before treatment followed by 8 mg orally every 12 hours for up to 5 days. CHILD 5 mg/m2 body surface IV over 15 minutes immediately before chemotherapy followed by 4 mg orally every 12 hours for up to 5 days ii) Prevention : 4 mg given by IV at induction of anaesthesia. CHILD over 2 years, 100 mcg/kg (max 4mg) by slow IV before, during or after induction of anaesthesia. Treatment of postoperative: 4 mg by IM or slow IV. CHILD over 2 years 100 mcg/kg (maximum 4mg) by slow IV.
Prochlorperazine Maleate 5 mg Tablet	APPL SS	B		i) Severe nausea & vomitting ii) Vertigo / labyrinthine disorders.	Nausea and vomiting Adult: As maleate or mesilate: 20 mg, further doses are given if needed. Recommended buccal dose: As maleate: 3-6 mg bid. Vertigo Adult: As maleate or mesilate: 15-30 mg daily, given in divided doses. May reduce gradually to 5-10 mg daily. Recommended buccal dose: 3-6 mg bid. May be taken with or without food.
Prochlorperazine Mesylate 12.5 mg/ml Injection	APPL SS	B		i) Severe nausea & vomitting ii) Vertigo / labyrinthine disorders.	Deep IM injection,12.5 mg repeated if necessary after 6 hours and then followed by an oral dose. Not recommended in children.

2.9 MISCELLANEOUS GASTRO-INTESTINAL

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Diosmin 450 mg and Hesperidin 50 mg Tablet	LP/SH SS *Surgical	B	Daflon	i) Haemorrhoids ii) Chronic venous insufficiency.	i) Acute attack : 6 tablets daily for the first 4 days, then 4 tablets daily in 2 divided doses for 3 days and 2 tablets thereafter. Chronic: 2 tablets daily ii) 2 tab daily with meals.
Mesalazine 500 mg MR Tablet	LP/KKM SS	A		Inflammatory bowel disease of ulcerative colitis and Crohn's disease.	Active ADULT: up to 4g given once daily or in divided doses CHILD: starting with 30-50 mg/kg/day in divided doses. Maximum dose: 75 mg/kg/day in divided doses. Total daily dose 4g/day Maintenance ADULT: 1.5g to 2g mesalazine once daily or divided doses CHILD: starting with 30-50 mg/kg/day in divided doses. Maximum dose: 75 mg/kg/day in divided doses. Total daily dose 2g/day Dose is according to product insert and dependent on the product/brand used.
Mesalazine 1g/100ml enema	LP/SH FPL KT *Surgical **(Named-Patient Basis)	A		For induction and maintenance of remission in patients with mild to moderately active ulcerative proctitis or left sided colitis	1 tube of enema at bedtime
Salicylazosulphapyridine (Sulfasalazine) 500 mg Tablet	APPL SS	A/KK		i) Treatment of inflammatory bowel disease of Ulcerative colitis and Crohn's disease ii) Rheumatoid arthritis.	i) ADULT, acute attack 1-2 g 4 times daily until remission occurs (if necessary corticosteroids may also be given), reducing to a maintenance dose of 500 mg 4 times daily, CHILD over 2 years, acute attack 40-60 mg/kg daily, maintenance dose 20-30 mg/kg daily ii) ADULT, initially; 0.5-1 g/day, increase weekly to maintenance dose of 2 g/day in 2 divided doses, maximun 3 g/day. CHILD over 6 years, juvenile rheumatoid arthritis: 30-50 mg/kg/day in 2 divided doses up to a maximum of 2 g/day.

3 CARDIOVASCULAR

3.1 POSITIVE INOTROPIC MEDICINES

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Digoxin 0.25 mg Tablet	APPL SS	B		Heart failure, with atrial fibrillation, supraventricular arrhythmias (particularly, atrial fibrillation).	Rapid digitalisation, 0.75-1.5 mg in divided doses over 24 hours; less urgent digitalisation, 250-500 mcg daily (higher dose may be divided). Maintenance: 62.5 - 500 mcg daily (higher dose may be divided) according to renal fuction, and in atrial fibrillation, on heart-response; usual range :125 - 250 mcg daily (lower doses may be appropriate in the elderly).
Digoxin 250 mcg/ ml Injection	LP/SH FPD KT	A		Heart failure with atrial fibrillation, supraventricular arrhythmias (particularly atrial fibrillation).	Rapid digitilisation: ADULT & CHILD over 10 years, initially 0.75 - 1.5 mg, followed by 250 mcg 6 hourly until digitilisation is complete.
Dobutamine 12.5 mg/ ml Injection	APPL SS	A		Hypotension and heart failure.	Initial 0.5-1 mcg/kg/min by IV, maintenance 2.5- 10 mcg/kg/min. Frequently, doses up to 20 mcg/kg/min are required for adequate hemodynamic improvement. On rare occasions,infusion rates up to 40 mcg/kg/min.

Dopamine HCl 40 mg/ml Injection	APPL SS	B		Non-hypovolemic hypotension.	Initial dose 2-5 mcg/kg/min with incremental changes of 5-10 mcg/kg/min at 10-15 minutes intervals until adequate response is noted. Most patients are maintained at less than 20 mcg/kg/min. If dosage exceeds 50 mcg/kg/min, assess renal function frequently.
Midodrine 2.5mg Tab	LP/SH FPL KT *Nephro (Named-Patient Basis)	UKK		Intradialytic hypotension	2.5mg EOD

3.2 DIURETICS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Frusemide 10 mg/ml Injection	APPL SS	B		Oedema	Initial: 20-50mg once via slow IV or IM Maintenance: Increase by 20mg every 2 hours and titrate to an effective dose if necessary CHILD: 0.5 - 1.5 mg/kg 6-24hourly. Dosing is individualised and according to product insert/ protocol.
Frusemide 10 mg/ml Oral Solution	LP/SH FPL KT	B		Oedema	ADULT Initial: 20-80mg daily Max. 600mg/day CHILD 1-3mg/kg daily Max. 40mg/day Dosing is individualised and according to product insert/ protocol.
Frusemide 40 mg Tablet	APPL SS	B		Oedema	ADULT Initial: 20-80mg daily Max. 600mg/day CHILD 1-3mg/kg daily Max. 40mg/day Dosing is individualised and according to product insert/ protocol.
Hydrochlorothiazide 25 mg Tablet	APPL SS	B		Diuretic, hypertension.	ADULT: Diuretics; 25-200 mg daily. Hypertension 12.5-25 mg daily CHILD: Oedema and hypertension; Adjunct; 1 to 2 mg/kg ORALLY daily in single or two divided doses; Children 2-12 years old MAX dose, not to exceed 100 mg ORALLY daily; Infants less than 6 months old, may require doses up to 3 mg/kg ORALLY daily in two divided doses, Infants up to 2 yrs old: MAX dose, not to exceed 37.5 mg ORALLY daily.
Mannitol 10% Injection (10 g/100 ml)	APPL FP KT	A		Cerebral oedema.	0.25- 2 g/kg IV of a 15% to 25% solution over 30-60 minutes. Safety and efficacy not established in children under 12 years of age.
Mannitol 20% Injection (20 g/100 ml)	APPL FP KT	A		Cerebral oedema.	0.25- 2 g/kg IV of a 15% to 25% solution over 30-60 minutes. Safety and efficacy not established in children under 12 years of age.
Spironolactone 25 mg Tablet	APPL SS	B		Oedema and ascites in cirrhosis of the liver, congestive heart failure.	ADULT:100 - 200 mg daily in divided doses. Increase to 400 mg if required. CHILD : initially 3 mg/kg daily in divided doses.

3.3 ANTIARRHYTHMIC MEDICINES

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Adenosine 3 mg/ml Injection	LP/SH SS	B		Rapid conversion of paroxysmal supraventricular tachycardia to sinus rhythm.	ADULT: Initially: 3 mg given as a rapid IV bolus (over 2 seconds). Second dose: If the first dose does not result in elimination of the supraventricular tachycardia within 1 or 2 minutes, 6 mg should be given also as a rapid IV bolus. Third dose: If the second dose does not result in elimination of the supraventicular tachycardia within 1-2 minutes, 12 mg should be given also as a rapid IV bolus.
Amiodarone 50 mg/ ml Injection	LP/SH SS	A*,A/KK		Category A*: i) Arrhythmias ii) Cardiopulmonary resuscitation of shock-resistant ventricular fibrillation in cardiac arrest Category A/KK: Ventricular arrythmia (ventricular tachycardia and ventricular fibrillation) *Prescribing restriction:* *Category A*: None* *Category A/KK: Use only for emergency cases in health clinic with Medical Officers (MO) upon consultation with Family Medicine Specialist (FMS)*	i) Initial: 5mg/kg over 20-120minutes Maintenance: 10-20mg/kg/24hr Max. dose: 1.2g/24hr. ii) Initial: 300mg or 5mg/kg rapid Additional 150mg if condition persists. Dosing is according to product insert / protocol.

Amiodarone 200 mg Tablet	LP/SH FPL KT	A*		Arrhythmias.	200 mg 3 times daily for 1 week, then reduced to 200 mg twice daily for another week Maintenance dose, usually 200 mg daily or the minimum required to control the arrhythmia Dosing is according to product insert/ protocol.
Lignocaine HCl (Lidocaine) 20 mg/ml Injection	APPL SS	B		Ventricular tachycardia and ventricullar fibrillation. For IV use. To be diluted before use.	50 - 100 mg IV as a bolus, repeated after 5 minutes if necessary. Maintenance : 1 - 4 mg/min by IV infusion under ECG monitoring.
Ivabradine 5mg Tablet	LP/KKM FPL KT *Medical	A*		i) Symptomatic treatment of chronic stable angina pectoris in coronary artery disease adults with normal sinus rhythm and heart rate ≥ 70 bpm. Ivabradine is indicated: - in adults unable to tolerate or with a contraindication to the use of beta-blockers - or in combination with beta-blockers in patients inadequately controlled with an optimal beta-blocker dose. ii) Treatment of chronic heart failure NYHA II to IV class with systolic dysfunction, in patients in sinus rhythm and whose heart rate is ≥ 75 bpm, in combination with standard therapy including beta-blocker therapy or when beta-blocker therapy is contraindicated or not tolerated.	Initial dose 5 mg twice daily. May increase dose after 3-4 weeks to 7.5 mg twice daily depending on response. ELDERLY, initial dose 2.5 mg twice daily and titrate to a maximum of 7.5 mg twice daily

3.4 BETA-ADRENOCEPTOR BLOCKING MEDICINE

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Atenolol 100 mg Tablet	APPL SS	B		i) Hypertension ii) Arrhythmias iii) Angina pectoris iii) Myocardial infarction	i), ii) & iii) 50 - 100 mg daily iv) Dosing is individualised and according to product insert / protocol.
Bisoprolol Fumarate 2.5 mg Tablet	LP/ Lamp Q SS	B		i) Hypertension ii)Coronary heart disease (angina pectoris) iii) Treatment of stable congestive cardiac failure in addition to ACEI's and diuretics	1.25 mg once daily, gradually titrate to maximum tolerable dose (i) & (ii): Max: 20mg/ day (iii): Max 10mg/ day
Bisoprolol Fumarate 5 mg Tablet	LP/KKM SS	B		i) Hypertension ii)Coronary heart disease (angina pectoris) iii) Treatment of stable congestive cardiac failure in addition to ACEI's and diuretics	1.25 mg once daily, gradually titrate to maximum tolerable dose (i) & (ii): Max: 20mg/ day (iii): Max 10mg/ day
Esmolol HCl 10 mg/ml Injection	LP/SH SS	A*		i) Supraventricular tachycardia ii) Intraoperative and postoperative tachycardia and/or hypertension	i) & ii) 50-200 mcg/kg/min Dosing is invidualised and according to product insert/protocol.
Labetalol HCl 100 mg Tablet	APPL SS	B		i) Mild, moderate or severe hypertension ii) Hypertension in pregnancy	i) & ii) Initial: 100mg twice daily Maintenance: 200-400mg twice daily Max. 2400mg daily in 3 or 4 divided doses Dosing is individualised and according to product insert / protocol.
Labetalol HCl 5 mg/ ml Injection	LP/KKM SS	B		Hypertension crisis.	ADULT: 20 mg injected slowly for at least 2 min, followed by 40-80 mg dose every 10 min, if necessary up to 300 mg. Patient should remain supine during and 3 hr after the procedure.
Metoprolol Tartrate 100 mg Tablet	APPL SS	B		i) Hypertension ii) Angina pectoris iii) Myocardial infarct iv) Cardiac arrhythmias v) Migraine prophylaxis vi) Hyperthyroidism	i) Initial: 100mg daily in 1 or 2 divided doses Maintenance: 200mg daily in divided doses Max. 400mg daily ii) 50-100mg 2-3 times daily Max. 400mg daily iii) Initial: 50mg twice daily Maintenance: 100mg twice daily iv) Initial: 50mg 2-3 times daily Maintenance: 300mg daily in divided doses v) 100-200mg daily in 2 divided doses vi) 150-200mg daily in 3-4 divided doses Dosing is invidualised and according to product insert/protocol.
Propranolol HCl 1 mg/ml Injection	LP/SH FPD KT	A		Arrhythmias and thyrotoxicosis crisis.	Slow IV injection in a dose of 1 mg over 1 minutes, repeated if necessary every 2 minutes until a maximum of 10 mg has been given in conscious patients and 5 mg in patients under anaesthesia. CHILD : 25 - 50 mcg/kg slow IV with appropriate monitoring.

Propranolol HCL 40 mg Tablet	APPL SS	B		i) Hypertension ii) Angina pectoris iii) Myocardial infarct iv) Cardiac arrhythmias v) Migraine prophylaxis vi) Hyperthyroidism vii) Hypertrophic obstructive cardiomyopathy viii) Portal hypertension	i) Initial: 40-80 mg twice daily Maintenance: 160-320 mg daily. Max. 640 mg daily ii) Initial: 40 mg 2-3 times daily Maintenance: 120-240 mg daily Max. 480mg daily iii) Initial (within 5-21 days of MI): 40 mg 4 times daily for 2-3 days Maintenance: 80 mg twice daily iv) 10-40 mg 3-4 times daily Max. 240 mg/day. v) Initial: 40 mg 2-3 times Maintenance: 80-160 mg daily Max. 240 mg/day. vi) 10-40 mg 3-4 times daily. Max. 240 mg/day. vii) 10-40 mg 3-4 times daily Dosing is individualised and according to product insert / protocol.

3.5 MEDICINES AFFECTING THE RENIN-ANGIOTENSIN SYSTEM AND SOME OTHER ANTIHYPERTENSIVE MEDICINES

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Captopril 25 mg Tablet	APPL SS	B		i) Hypertension ii) Congestive heart failure iii) Post-myocardial infarction iv) Diabetic kidney disease.	i) Initial: 25-75mg in 2-3 divided doses Maintenance: 100-150mg in 2-3 divided doses ii) Initial: 6.25-12.5mg 2-3 times daily Maintenance: 75-150mg daily in divided doses iii) Initial: 6.25mg followed by 12.5mg and then 25mg Maintenance: 75-150mg daily in 2-3 divided doses iv) 75-100 mg in divided doses Dosing is individualised and according to product insert / protocol.
Enalapril 20 mg Tablet	LP/KKM SS	B		i) Hypertension ii) Heart failure iii) Prevention of coronary ischemic events in patients with left ventricular dysfunction	i) Initial: 5mg once daily. Maintenance: 10-20mg once daily Max. 40mg daily in 1-2 divided doses ii) & iii) Initial: 2.5mg once daily Maintenance: 20mg in 1-2 divided doses Max. 40mg daily in 2 divided doses Dosing is individualised and according to product insert / protocol.
Enalapril 5 mg Tablet	APPL SS	B		i) Hypertension ii) Heart failure iii) Prevention of coronary ischemic events in patients with left ventricular dysfunction	i) Initial: 5mg once daily. Maintenance: 10-20mg once daily Max. 40mg daily in 1-2 divided doses ii) & iii) Initial: 2.5mg once daily Maintenance: 20mg in 1-2 divided doses Max. 40mg daily in 2 divided doses Dosing is individualised and according to product insert / protocol.
Hydralazine HCl 20 mg Injection	LP/SH FPD KT *O&G	B		Hypertensive crisis in pregnancy.	i) Slow IV Injection, ADULT: 5-10 mg diluted with 10 ml sodium chloride 0.9%. May be repeated after 20-30 minutes if necessary. ii) By IV infusion 200-300 mcg/minutes. Maintenance dose 50-150 mcg/minutes.
Losartan 50 mg Tablet	LP/KKM SS	B		Patients intolerant to ACE inhibitors in: i) Hypertensive patient with left ventricular hypertrophy ii) Type 2 Diabetes Mellitus with chronic kidney disease iii) Hypertension	i), ii) & iii) Initial: 50mg once daily Max: 100mg once daily Dosing is individualised and according to product insert / protocol.
Losartan Potassium 50 mg & Hydrochlorothiazide 12.5 mg Tablet	LP/KKM FPL KT	A/KK	**Hyzaar**	i) Hypertension in patients intolerant to ACE inhibitors ii) Hypertensive patient with left ventricular hypertrophy	i) & ii) Initial: Losartan/Hydrochlorothiazide 50/12.5mg once daily Max: Losartan/Hydrochlorothiazide 100/25mg once daily Dosing is individualised and according to product insert / protocol.
Methyldopa 250 mg Tablet	APPL SS	B		Hypertension.	Adult: 250 mg 2 - 3 times daily, gradually increased at intervals of 2 or more days, maximum; 3 g/day. Elderly: initially 125 mg twice daily, increased gradually, maximum; 2 g daily. Child: Initially, 10 mg/kg or 300 mg/m2 daily in 2-4 divided doses; increase as necessary. Max: 65 mg/kg, 2 g/m2 or 3 g daily, whichever is least.

Minoxidil 5 mg Tablet	LP/SH FPL KT	A*		Severe hypertension.	ADULTS and CHILD above 12 years old: Initially 5 mg daily in single or divided doses (elderly 2.5 mg). May increase by 5 - 10 mg daily at intervals of 3 or more days until optimum control is achieved. Maximum 50 mg daily.
Perindopril 4 mg and Indapamide 1.25 mg Tablet	LP/SH SS *Medical	B	**Coversyl Plus**	Essential hypertension, for patients whose blood pressure is insufficiently controlled by perindopril alone.	One tablet daily, preferably taken in the morning and before a meal.
Perindopril 4 mg Tablet	APPL SS	B		i) Hypertension ii) Stable coronary artery disease iii) Heart failure	i) & ii) Initial: 4mg once daily Max. 8mg daily iii) Initial: 2mg once daily Maintenance: 4mg once daily Dosing is individualised and according to product insert / protocol.
Perindopril Arginine 10mg, Indapamide 2.5mg & Amlodipine 10mg tablet	LP/SH FPL KT *Medical	A/KK		As substitution therapy for treatment of essential hypertension, in patients already controlled with perindopril/indapamide fixed dose combination and amlodipine, taken at the same dose level.	1 tablet a day
Prazosin HCl 1 mg Tablet	APPL SS	B		Hypertension.	Initially 0.5 mg 2 - 3 times daily, the initial dose on retiring to bed at night; increased to 1 mg 2 - 3 times daily after 3 - 7 days: further increased if necessary to maximum 20 mg daily.
Prazosin HCl 2 mg Tablet	APPL SS	B		Hypertension.	Initially 0.5 mg 2 - 3 times daily, the initial dose on retiring to bed at night; increased to 1 mg 2 - 3 times daily after 3 - 7 days: further increased if necessary to maximum 20 mg daily.
Prazosin HCl 5 mg Tablet	APPL SS	B		Hypertension.	Initially 0.5 mg 2 - 3 times daily, the initial dose on retiring to bed at night; increased to 1 mg 2 - 3 times daily after 3 - 7 days: further increased if necessary to maximum 20 mg daily.
Sacubitril/ Valsartan 50 mg tablet	LP/SH FPL KT *Medical (Dr Hidayah) *Visiting Specialist *Dr Goh Chong Ciek	A*	**Entresto**	To reduce the risk of cardiovascular death and hospitalization for heart failure in adult patients with chronic heart failure. Prescribing restriction: i. For heart failure patients with reduced ejection fraction ii. NYHA class II-IV iii. Second line for patients intolerant of or not responding to ACEi or ARB.	The recommended starting dose of sacubitril/valsartan is one tablet of 100 mg twice daily. The dose should be doubled at 2-4 weeks to the target dose of one tablet of 200 mg twice daily, as tolerated by the patient. For the following patients, initiate with sacubitril/valsartan 50 mg twice daily. - Not currently on ACEI/ ARB - Switching from low dose of ACEI/ ARB - In patients with systolic BP ≥100 to 110 mmHg. - In patients with moderate renal impairment (eGFR 30-60 ml/min/1.73 m2) - In patients with moderate hepatic impairment (Child-Pugh B classification) For patients "Not currently on ACEI/ ARB" and "switching from low dose of ACEI/ ARB", double the dose every 3-4 weeks to achieve the target dose of 200 mg twice daily as tolerated by the patient.

Sacubitril/ Valsartan 100 mg tablet	LP/SH FPL KT *Medical (Dr Hidayah) *Visiting Specialist *Dr Goh Chong Ciek	A*	**Entresto**	To reduce the risk of cardiovascular death and hospitalization for heart failure in adult patients with chronic heart failure. Prescribing restriction: i. For heart failure patients with reduced ejection fraction ii. NYHA class II-IV iii. Second line for patients intolerant of or not responding to ACEi or ARB.	The recommended starting dose of sacubitril/valsartan is one tablet of 100 mg twice daily. The dose should be doubled at 2-4 weeks to the target dose of one tablet of 200 mg twice daily, as tolerated by the patient. For the following patients, initiate with sacubitril/valsartan 50 mg twice daily. - Not currently on ACEI/ ARB - Switching from low dose of ACEI/ ARB - In patients with systolic BP ≥100 to 110 mmHg. - In patients with moderate renal impairment (eGFR 30-60 ml/min/1.73 m2) - In patients with moderate hepatic impairment (Child-Pugh B classification) For patients "Not currently on ACEI/ ARB" and "switching from low dose of ACEI/ ARB", double the dose every 3-4 weeks to achieve the target dose of 200 mg twice daily as tolerated by the patient.
Sacubitril + Valsartan 200mg Tablet	LP/SH FPL KT *Medical (Dr Hidayah) *Visiting Specialist *Dr Goh Chong Ciek	A*	**Entresto**	To reduce the risk of cardiovascular death and hospitalization for heart failure in adult patients with chronic heart failure. Prescribing restriction: i. For heart failure patients with reduced ejection fraction ii. NYHA class II-IV iii. Second line for patients intolerant of or not responding to ACEi or ARB.	The recommended starting dose of sacubitril/valsartan is one tablet of 100 mg twice daily. The dose should be doubled at 2-4 weeks to the target dose of one tablet of 200 mg twice daily, as tolerated by the patient. For the following patients, initiate with sacubitril/valsartan 50 mg twice daily. - Not currently on ACEI/ ARB - Switching from low dose of ACEI/ ARB - In patients with systolic BP ≥100 to 110 mmHg. - In patients with moderate renal impairment (eGFR 30-60 ml/min/1.73 m2) - In patients with moderate hepatic impairment (Child-Pugh B classification) For patients "Not currently on ACEI/ ARB" and "switching from low dose of ACEI/ ARB", double the dose every 3-4 weeks to achieve the target dose of 200 mg twice daily as tolerated by the patient.
Sildenafil Citrate 50 mg Tablet	LP/SH FPD KT *Paediatric	UKK		i) Persistent pulmonary pypertension of newborn ii) Pulmonary arterial hypertension.	0.5 - 3 mg/kg/dose every 6 - 12 hours.
Telmisartan 40 mg Tablet	LP/KKM SS	A/KK		Patients intolerant to ACE inhibitors in: i) Hypertension ii) Reduction of the risk of myocardial infarction, stroke, or death from cardiovascular causes in patients 55 years or older at high risk of developing major cardiovascular events who are unable to take ACE inhibitors	i) 40mg - 80mg once daily. Max: 160mg daily ii) 80mg once daily Dosing is individualised and according to product insert / protocol.
Telmisartan 80 mg Tablet	LP/KKM SS	A/KK		Patients intolerant to ACE inhibitors in: i) Hypertension ii) Reduction of the risk of myocardial infarction, stroke, or death from cardiovascular causes in patients 55 years or older at high risk of developing major cardiovascular events who are unable to take ACE inhibitors	i) 40mg - 80mg once daily. Max: 160mg daily ii) 80mg once daily Dosing is individualised and according to product insert / protocol.
Valsartan 160 mg & Amlodipine 10 mg Tablet	LP/SH FPL KT *Medical	A/KK	**Exforge**	Essential hypertension in patients whose blood pressure is not adequately controlled by monotherapy	Doses range from amlodipine besylate 5 mg/valsartan 160 mg to amlodipine besylate 10 mg/valsartan 320 mg ORALLY once daily, with dose titration occurring every 1 to 2 weeks if necessary. MAX amlodipine besylate 10 mg/valsartan 320 mg.

3.6 CALCIUM-CHANNEL BLOCKERS AND NITRATES

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Amlodipine 10 mg Tablet	APPL SS	B		Hypertension	5 mg once daily. Max: 10 mg once daily.
Diltiazem HCl 30 mg Tablet	APPL SS	B		i) Treatment of angina ii) Hypertension	Initially 30 mg tds, may increase to 60 mg tds (elderly intially twice daily: increased if necessary to 360 mg daily.

Diltiazem HCl 100mg sustained release capsule	LP/SH FPL KT *Nephro	A/KK		Treatment of angina pectoris in the following cases: i. Inadequate response or intolerance to beta-blockers and Isosorbide Dinitrate ii. Contraindication to beta-blockers iii. Coronary artery spasm	Usually, for adults, 100 mg to 200 mg to be administered orally once daily. If the effect is insufficient, the dosage may be increased to 200 mg once daily.
Felodipine 5 mg Extended Release Tablet	APPL SS *Medical	A/KK		Hypertension.	Initiate at 5 mg once daily. Usual dose, 5 - 10 mg once daily in the morning.
Felodipine 10 mg Extended Release Tablet	APPL SS *Medical	A/KK		Hypertension.	Initiate at 5 mg once daily. Usual dose, 5 - 10 mg once daily in the morning.
Glyceryl Trinitrate 0.5 mg Sublingual Tablet	APPL SS	C	**GTN**	Prophylaxis and treatment of angina and left ventricular failure.	0.5 - 1 mg sublingually may be repeated every 5 minutes until relief is obtained. Seek physician if the pain persist after a total of 3 tablets in a 15 minutes period.
Glyceryl Trinitrate 5 mg/ml Injection	APPL SS	A, A/KK	**GTN**	Prescriber Category A: i) Angina pectoris. ii) Congestive heart failure. iii) Production of controlled hypotension during surgery. Prescriber Category A/KK: iv) Control of hypertensive episodes..	Initial: 5-25mcg/min Dosing is individualised and according to product insert or protocol.
Isosorbide Dinitrate 10 mg Tablet	APPL FP KT	B		Prophylaxis and treatment for: i) Angina ii) Left ventricular failure.	i) 30 - 120 mg daily in divided doses. ii) 40 - 160 mg, up to 240 mg if required.
Isosorbide-5-Mononitrate 60 mg SR Tablet	LP/SH SS	A/KK		Angina pectoris	Initial: 30mg daily Maintenance: 30-60mg once daily Max. 120mg once daily.
Nifedipine 10 mg Tablet	APPL SS	B		Hypertension.	Initial dose of 10 mg twice daily . Usual range 10 - 30 mg tds. Maximum : 120 - 180 mg per day. Elderly: Dose reduction may be necessary.
Verapamil HCl 2.5 mg/ml Injection	LP/SH FPD KT	A/KK		Supraventricular tachycardia.	initially 5- 10 mg given by slow IV over at least 2 minutes. The dose can be repeated 10 mg 30 minutes after the first dose if the intial response is not adequate.
Verapamil HCl 40 mg Tablet	APPL SS	B		i) Supraventricular tachyarrhythmias (SVT) prophylaxis ii) Angina iii) Hypertension	i) 120-480mg in 2-3 divided doses ii) 80mg – 120mg 3 times daily iii) Initial: 240 mg daily in 2-3 divided doses. Max: 480 mg daily

3.7 SYMPATHOMIMETICS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Adrenaline Acid (Epinephrine) Tartrate 1 mg/ml Injection	APPL SS	B		Cardiopulmonary resuscitation.	1 mg by intravenous injection repeated every 3 - 5 minutes according to response.
Ephedrine HCl 30 mg/ml Injection	APPL SS	B		Treatment of bronchial asthma, adjunct to correct haemodynamic imbalances and treat hypotension in epidural and spinal anaesthesia.	By IM, SC or IV. Severe, acute bronchospasm : 12.5-25 mg. Further dosage should be determine by patient response. When used as pressor agent : ADULT 25- 50 mg SC/IM. If necessary, a second IM dose of 50 mg or an IV dose of 25 mg may be given. Direct IV injection, 10- 25 mg may be given slowly. Maximum parenteral ADULT dose : 150 mg in 24 hours. CHILD : 3 mg/kg or 100 mg/m2 SC or IV daily, in 4-6 divided dose.
Noradrenaline Acid Tartrate (Norepinephrine Bitartrate) 1 mg/ml Injection	LP/KKM SS	A, A/KK		Category A: i) For blood pressure control in certain acute hypotensive states (e.g.pheochromocytomectomy, sympathectomy, poliomyelitis, spinal anesthesia, myocardial infarction, septicemia, blood transfusion, and drug reactions). ii) As an adjunct in the treatment of cardiac arrest and profound hypotension Category A/KK: Septic shock and shock where peripheral vascular resistance is low *Prescribing Restrictions* *Category A: None* *Category A/KK: Use only for emergency cases in health clinic with Medical Officers (MO) upon consultation with Family Medicine Specialist (FMS)*	Infuse and titrate to desired pressure response. Range: 0.05 - 0.5 mcg/kg/minute

Phenylephrine HCL 10 mg/ml Injection	LP/SH FPD KT *All diciplines	UKK		Hypotension, vascular failure in shock, supraventricular tachycardia.	ADULT IV Bolus : 0.1-0.5 mg/dose every 5 to 10 minutes IV infusion : 0.5 mcg/kg/minute CHILD IV Bolus 5-20 mcg/kg/dose every 10 to 15 minutes IV infusion 0.1-0.5 mcg/kg/minute.

3.8 ANTICOAGULANTS AND PROTAMINE

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Apixaban 5mg film coated tablet.	LP/SH FPL KT *Medical-Geriatric	A*		i) Prevention of stroke and systemic embolism in adult patients with non-valvular atrial fibrillation (NVAF), with one or more risk factors, such as prior stroke or transient ischaemic attack (TIA); age ≥ 75 years; hypertension; diabetes mellitus; symptomatic heart failure (NYHA Class ≥ II) ii) Treatment of deep vein thrombosis (DVT) and pulmonary embolism (PE), and prevention of recurrent DVT and PE in adults for haemodynamically unstable PE patients.	i) 5 mg taken orally twice daily. Dose reduction: 2.5mg taken orally twice daily in NVAF patients with at least two of the following characteristics: age ≥80 years old, body weight≤60kg, or serum creatinine≥1.5mg/dL (133micromole/L) ii) For treatment of acute DVT and PE 10 mg twice daily for the first 7 days (max. 20mg daily) followed by 5mg twice daily (max. 10mg daily) For prevention of recurrent DVT and PE 2.5mg twice daily (max. 5mg daily) following completion of 6 months of treatment with apixaban 5 mg twice daily or with another anticoagulant
Dabigatran Etexilate 150 mg Capsule	APPL FPL KT *Medical (Dr. Hidayah)	A*		i) Reduction of the risk of stroke and systemic embolism in patients with non-valvular atrial fibrillation (AF). ii) Treatment of deep vein thrombosis (DVT) and pulmonary embolism (PE) and prevention of recurrent DVT and PE in adults.	i) Recommended daily dose is 300 mg taken orally as 150 mg hard capsule twice daily. Therapy should be continued lifelong. ii) Recommended daily dose is 300 mg taken as one 150mg capsule BD following treatment with a parenteral anticoagulant for at least 5 days. The duration of therapy should be individualized after careful assessment of the treatment benefit against the risk for bleeding. For the following groups, the recommended daily dose is 220 mg taken as one 110 mg capsule twice daily: - Patients aged 80 years or above - Patients who receive concomitant verapamil Special patient population for renal impairment : Renal function should be assessed by calculating the creatinine clearance (CrCl) prior to initiation of treatment with Dabigatran to exclude patients for treatment with severe renal impairment (i.e. CrCl < 30 ml/min).
Enoxaparin Sodium 40 mg Injection	LP/KKM SS	A*, A/KK		**PRESCRIBER CATEGORY A*:** i. Prophylaxis of venous thromboembolic diseases (DVT and PE) especially in perioperative, high risk surgical cases and medical patients with acute illness at increased risk of VTE ii. Treatment of venous thromboembolic diseases (DVT and PE). iii. Acute coronary syndrome: a. Treatment of unstable angina and Non-ST-segment elevation myocardial infarction (NSTEMI), in combination with oral acetylsalicylic acid. b. Treatment of acute ST-segment elevation myocardial infarction (STEMI) including patients to be managed medically or with subsequent Percutaneous Coronary Intervention (PCI). **PRESCRIBER CATEGORY A/KK:** Prevention of DVT in antenatal and/or postnatal women with VTE risk scoring of 3 or more. A written consent form by the patient is necessary prior treatment initiation. Healthcare facilities are advised to refer to “Panduan Penggunaan Ubat- Ubatan yang Mengandungi Unsur Tidak Halal”.	**PRESCRIBER CATEGORY A*:** i. Moderate risk: 20mg SC 2 hours before surgery then 20mg SC once daily High risk: 40mg SC 12 hours before surgery then 40mg SC once daily Medical patients: 40mg once daily ii. 1.5mg/kg once daily or 1mg/kg twice daily iii. 1 mg/kg every 12 hours **PRESCRIBR CATEGORY A/KK:** <50 kg: 20mg OD 50-90 kg: 40mg OD 91-130 kg: 60mg OD 131-170 kg: 80mg OD >170 kg: 0.6mg/kg/da

Enoxaparin Sodium 60 mg Injection	LP/KKM SS	A*, A/KK		**PRESCRIBER CATEGORY A*:** i. Prophylaxis of venous thromboembolic diseases (DVT and PE) especially in perioperative, high risk surgical cases and medical patients with acute illness at increased risk of VTE ii. Treatment of venous thromboembolic diseases (DVT and PE). iii. Acute coronary syndrome: a. Treatment of unstable angina and Non-ST-segment elevation myocardial infarction (NSTEMI), in combination with oral acetylsalicylic acid. b. Treatment of acute ST-segment elevation myocardial infarction (STEMI) including patients to be managed medically or with subsequent Percutaneous Coronary Intervention (PCI). **PRESCRIBER CATEGORY A/KK:** Prevention of DVT in antenatal and/or postnatal women with VTE risk scoring of 3 or more. A written consent form by the patient is necessary prior treatment initiation. Healthcare facilities are advised to refer to "Panduan Penggunaan Ubat- Ubatan yang Mengandungi Unsur Tidak Halal".	**PRESCRIBER CATEGORY A*:** i. Moderate risk: 20mg SC 2 hours before surgery then 20mg SC once daily High risk: 40mg SC 12 hours before surgery then 40mg SC once daily Medical patients: 40mg once daily ii. 1.5mg/kg once daily or 1mg/kg twice daily iii. 1 mg/kg every 12 hours **PRESCRIBR CATEGORY A/KK:** <50 kg: 20mg OD 50-90 kg: 40mg OD 91-130 kg: 60mg OD 131-170 kg: 80mg OD >170 kg: 0.6mg/kg/da
Fondaparinux Sodium 2.5 mg/0.5 ml Injection	LP/KKM SS	A*, A		Prescribing Category A*: i) Prevention of venous thromboembolic events (VTE) in orthopedic surgery (e.g. hip fracture, major knee or hip replacement surgery), abdominal surgery in patients at risk of thromboembolic complication. Precribing Category A: i) Treatment of unstable angina or non-ST segment elevation myocardial infarction [UA/NSTEMI] in patients for whom urgent invasive management (PCI) is not indicated. ii) Treatment of ST segment elevation myocardial infarction (STEMI) in patients managed with thrombolytics or are not receiving other forms of reperfusion therapy	Prescribing Category A*: i) 2.5 mg once daily given by SC, administered 6 hr following surgical closure provided homeostasis has been established. Usual duration of therapy is 5 to 9 days; for hip fracture patients, an extended course of up to 24 days is recommended. Precribing Category A: i) ADULT more than 18 years: 2.5 mg once daily given by SC, initiated as soon as possible after diagnosis and continued for up to 8 days or until hospital discharge. If patient needs to undergo PCI, unfractionated heparin to be admin as per local practice protocol, taking into account the patient's bleeding risk and time of last dose of fondaparinux. Fondaparinux may be restarted no earlier than 2 hr after sheath removal. ii) ADULT more than 18 years: 2.5 mg once daily; first dose to be given IV (directly through an existing IV line or as infusion in 25 or 50 ml of 0.9% saline over 1-2 min), subsequent doses to be given SC. Treatment to be initiated as soon as diagnosis is made and continued up to a max of 8 days or until hospital discharge, whichever comes earlier. If patient needs to undergo non-primary PCI, unfractionated heparin to be admin as per local practice protocol, taking into account the patient's bleeding risk and time of last dose of fondaparinux. Fondaparinux may be restarted no earlier than 3 hr after sheath removal
Fondaparinux Sodium 7.5 mg/ 0.6 ml	LP/SH FPD KT	A*		i) Treatment of acute Deep Vein Thrombosis (DVT) ii) Treatment of Pulmonary Embolism (PE).	The recommended dose to be administered by SC injection once daily is: 5mg for body weight < 50kg, 7.5mg for body weight 50 - 100kg, 10mg for body weight greater than 100kg. Treatment should be continued for at least 5 days and until adequate oral anticoagulation is established (INR 2 to 3). Concomitant treatment with vitamin K antagonists should be initiated as soon as possible, usually within 72 hours. The usual duration of treatment is 5 to 9 days.
Heparin 5000 units/ml Injection	APPL SS	B		i) Prophylaxis and treatment of venous thrombosis and pulmonary embolism. ii) Treatment of myocardial infarction and arterial embolism. iii) Prevention of clotting in arterial and heart surgery and for prevention of cerebral thrombosis.	i) By IV injection, loading dose of 5000 units (10,000 units in severe pulmonary embolism) followed by continuous infusion of 15 - 25 units/kg/hr. By SC injection (for DVT) of 15,000 units every 12 hours (laboratory monitoring on daily basis essential to adjust dose). Small adult or child, lower loading dose then, 15 - 25 units/kg/hr by IV infusion, or 250 units/kg every 12 hours by SC injection. ii) As i), for unstable angina and acute peripheral arterial occlusion. iii) Prophylaxis in general surgery, by SC injection, 5000 units 2 hours before surgery, then every 8 - 12 hours for 7 days or until patient is ambulant, during pregnancy (with monitoring), 5000-10000 units every 12 hours. An adjusted dose regimen may be used for major orthopaedic surgery or low molecular weight heparin may be selected.

Heparin Sodium 50 units in Sodium Chloride Injection	APPL SS	B		To maintain patency of peripheral venous catheters.	Flush with 5 ml (50 units) every 4 hours or as required.
Rivaroxaban 10 mg Tablet	APPL FPL KT *Ortho (Specialist Ortho)	A*		i. Prevention of venous thromboembolism in patients undergoing elective hip or knee replacement surgery ii. Treatment of deep vein thrombosis (DVT), and prevention of recurrent DVT and pulmonary embolism (PE) following an acute DVT in adults iii. Treatment of Pulmonary Embolism (PE), and prevention of recurrent DVT and pulmonary embolism (PE) following an acute PE in adults	Indication i: 10 mg once daily. Initial dose should be taken 6 to 10 hour post-surgery provided that haemostasis has been established. Duration of treatment: Major hip surgery 5 weeks. Major knee surgery 2 weeks Indication ii & iii 15mg BD for 21 days, followed by 20mg OD Dose reduction to 15mg OD for renal impairment (CrCl 15 to 49 ml/min)
Rivaroxaban 15 mg Tablet	LP/SH FPL KT *Medical	A*		i) Prevention of stroke and systemic embolism in adult patients with non-valvular atrial fibrillation with one or more risk factors, such as Congestive heart failure (CHF), hypertension, age ≥ 75 yrs, diabetes mellitus, prior stroke or transient ischaemic attack. ii) Treatment of deep vein thrombosis (DVT), and prevention of recurrent DVT and pulmonary embolism (PE) following an acute DVT in adults. iii) Treatment of Pulmonary Embolism (PE), and prevention of recurrent DVT and pulmonary embolism (PE) following an acute PE in adults.	i) 20mg once daily or 15mg once daily (for patients with moderate renal impairment (creatinine clearance 30-49 ml/min) ii) & (iii) 15mg BD for 21 days, followed by 20mg OD.
Rivaroxaban 20 mg Tablet	APPL FPL KT *Medical	A*		i) Prevention of stroke and systemic embolism in adult patients with non-valvular atrial fibrillation with one or more risk factors, such as Congestive heart failure (CHF), hypertension, age ≥ 75 yrs, diabetes mellitus, prior stroke or transient ischaemic attack. ii) Treatment of deep vein thrombosis (DVT), and prevention of recurrent DVT and pulmonary embolism (PE) following an acute DVT in adults. iii) Treatment of Pulmonary Embolism (PE), and prevention of recurrent DVT and pulmonary embolism (PE) following an acute PE in adults.	i) 20 mg once daily or 15 mg once daily (for patients with moderate renal impairment (creatinine clearance 30-49 ml/min) ii) & iii)15 mg BD for 21 days, followed by 20 mg OD.
Warfarin Sodium 1 mg Tablet	LP/SH SS	B		Treatment and prophylaxis of thromboembolic disorders.	Initially 2 to 5mg per day. Maintenance dose, 2-10mg daily according to the INR Dosing is individualised based on patient's INR and according product insert/protocol/ guideline.
Warfarin Sodium 2 mg Tablet	LP/SH SS	B		Treatment and prophylaxis of thromboembolic disorders.	Initially 2 to 5mg per day. Maintenance dose, 2-10mg daily according to the INR Dosing is individualised based on patient's INR and according product insert/protocol/ guideline.
Warfarin Sodium 3 mg Tablet	LP/KKM SS	B		Treatment and prophylaxis of thromboembolic disorders.	Initially 2 to 5mg per day. Maintenance dose, 2-10mg daily according to the INR Dosing is individualised based on patient's INR and according product insert/protocol/ guideline.
Warfarin Sodium 5 mg Tablet	LP/SH SS	B		Treatment and prophylaxis of thromboembolic disorders.	Initially 2 to 5mg per day. Maintenance dose, 2-10mg daily according to the INR Dosing is individualised based on patient's INR and according product insert/protocol/ guideline.

3.9 ANTIPLATELET MEDICINES

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE

Acetylsalicylic Acid 300 mg Soluble Tablet	APPL FPD KT	C		Initial treatment of cardiovascular disorders such as angina pectoris and myocardial infarction and for the prevention of cardiovascular events in patients at risk. Other such uses include the treatment and prevention of cerebrovascular disorders such as stroke.	150mg to be taken daily. Use in children under 16 years old is not recommended
Acetylsalicylic Acid 150mg Dispersible Tablet	LP/SH FPL KT	C		Initial treatment of cardiovascular disorders such as angina pectoris and myocardial infarction and for the prevention of cardiovascular events in patients at risk. Other such uses include the treatment and prevention of cerebrovascular disorders such as stroke	150mg to be taken daily. Dose to be individualised. Use in children under 16 years old is not recommended
Acetylsalicylic Acid 75mg Dispersible Tablet	LP/SH FPL KT	C		Initial treatment of cardiovascular disorders such as angina pectoris and myocardial infarction and for the prevention of cardiovascular events in patients at risk. Other such uses include the treatment and prevention of cerebrovascular disorders such as stroke	150mg to be taken daily. Dose to be individualised. Use in children under 16 years old is not recommended
Acetylsalicylic Acid 100 mg, Glycine 45 mg Tablet	LP/KKM SS	B	**Cardiprin**	Prevention of myocardial infarct, stroke, vascular occlusion and deep vein thrombosis. Transient ischaemic attacks.	1 tablet daily.
Clopidogrel 75 mg Tablet	LP/KKM SS *Medical Specialist Only *1 month supply only for discharge case	A/KK		Secondary prevention of atherothrombotic events in: i) Adult patients suffering from myocardial infarction (from a few days until less than 35 days), ischaemic stroke (from 7 days until less than 6 months) or established peripheral arterial disease. Prescribing restriction: as second/third line treatment in patients who are sensitive or intolerant to acetylsalicylic acid and/or ticlopidine). ii) Adult patients suffering from acute coronary syndrome: • Non-ST segment elevation acute coronary syndrome (unstable angina or non-Q-wave myocardial infarction), including patients undergoing a stent placement following percutaneous coronary intervention. • ST segment elevation acute myocardial infarction, in combination with acetylsalicylate acid (ASA) in medically treated patients eligible for thrombolytic therapy.	75 mg once daily.
Dipyridamole 75 mg Tablet	LP/SH FPL KT *Paediatric	UKK		As an adjunct to oral anticoagulation/ antiplatelet therapy in the prophylaxis of cerebrovascular events.	75 - 150 mg 3 times daily to be taken 1 hour before meals.
Ticagrelor 90 mg Tablet	LP/KKM FPL KT *Medical (Dr. Hidayah), (Geriatric)	A*		Co-administration with aspirin, for the prevention of atherothrombotic events: a) Second line treatment for patients readmitted to hospital with recurrent atherothrombotic event failing treatment with clopidogrel. b) STEMI patients going for invasive PCI c) NSTEMI/UA patients with intermediate to high risk TIMI score d) Other complicated ACS cases treated either medically or invasively via PCI or CABG (risk of Stent thrombosis, 3VD etc.)	Initially, 180mg as single dose followed by 90mg bd with maintenance dose of ASA 75-150 mg daily.
Ticlopidine HCl 250 mg Tablet	LP/KKM SS	A/KK		i) Prevention of thrombotic stroke for patients who are sensitive /intolerant to Acetysalicylic Acid ii) Maintenance of coronary bypass surgery or angioplasty iii) Maintenance of patency of access in patients on chronic haemodialysis.	250 mg twice daily taken with food.

3.10 MYOCARDIAL INFARCTION AND FIBRINOLYSIS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE

Alteplase 50 mg per vial Injection	LP/KKM FPD KT *Medical (Dr. Hidayah) *A&E	A*		Thrombolytic treatment of acute ischaemic stroke.	0.9 mg/kg (maximum of 90 mg) infused over 60 minutes with 10% of the total dose administered as an initial intravenous bolus. Treatment must be started as early as possible within 4.5 hours after onset of stroke symptoms and after exclusion of intracranial haemorrhage by appropriate imaging technique.
Streptokinase 1,500,000 IU Injection	APPL SS	A*		i) Acute Myocardial Infarction ii) Acute Pulmonary Embolism	i) 1,500,000 units over 30 - 60 minutes. ii) 250,000 units by IV infusion over 30 minutes, then 100,000 units every hour for up to 12 - 72 hours with monitoring of clotting factors.
Tenecteplase 10,000 unit (50mg) Injection	LP/SH FPD KT *Medical (Dr. Hidayah) *Anaes *A&E	A*		Acute myocardial reinfarction where streptokinase is contraindicated due to previous streptokinase induced antibodies. (indicated when antibodies was given more than 5 days and less than 12 months).	Less than 60 kg: 30 mg; 60 to 69 kg: 35 mg, 70 to 79 kg: 40 mg; 80 to 89 kg: 45 mg; 90 kg or above: 50 mg. Administer single IV bolus over 5 –10 seconds.
Urokinase 60,000 IU injection	LP/SH FPD KT *Pead (specialist)	UKK		Treatment of thromboembolic disease such as mycocardial infarction, peripheral artery occlusion, pulmonary embolism, retinal artery thrombosis and other ophthalmologic use.	ADULT: Acute pulmonary embolism: IV loading dose 4400 iu/kg over 10 mins, maintenance 4400 iu/kg/hour for 12 hours. Peripheral vascular occlusion: infuse 2500 iu/ml into clot at a rate of 4000 iu/min for 2 hours. This may be repeated up to 4 times. Hyphaema: 5000 IU in 2 ml saline solution is injected and withdrawn repeatedly over the iris. If residual clot remains, leave 0.3ml in the anterior chambers for 24-48 hours to facilitate futher dissolution.

3.11 ANTIFIBRINOLYTIC MEDICINES AND HAEMOSTATICS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Factor IX, Factor II, Factor VII and Factor X In Combination Injection	LP/SH FPD KT *Medical (Dr. Hidayah) *A&E	A*	Octaplex	i) Treatment and perioperative prophylaxis of bleeding in acquired deficiency of the prothrombin complex coagulation factors, such as deficiency caused by treatment with vitamin K antagonists, or in case of overdose of vitamin K antagonists, when rapid correction of the deficiency is required. ii) Treatment and perioperative prophylaxis of bleeding in congenital deficiency of any of the vitamin K dependent coagulation factors only if purified specific coagulation factor product is not available.	Amount and frequency of administration should be calculated on an individual patient basis. Individual dosage requirements can only be identified on the basis of regular determinations of the individual plasma levels of the coagulation factors of interest or on the global tests of the prothrombin complex levels (INR, Quick's test) and a continuous monitoring of the clinical condition of the patient. An approximate calculation is as follows: Required dose (IU) = body weight (kg) x desired factor rise (IU/dl or % of normal) x reciprocal of the estimated recovery, i.e. Factor II = 53 Factor VII = 59 Factor IX = 77 Factor X = 56 As product may differ from one to another, it is strongly advised to refer to the manufacturer (product insert) in regards to dosing calculation.
Factor VIII (Human blood coagulation factor) & Von Willebrand factor 250iu Injection	APPL FPD KT	A*	Alphanate	i)The treatment and prophylaxis of haemorrhage or surgical bleeding in Von Willebrand Disease (VWD) when 1-deamino-8-D-arginine vasopressin (desmopressin, DDAVP) treatment alone is ineffective or contraindicated. ii)The treatment and prophylaxis of bleeding associated with factor VIII deficiency due to haemophilia A.	i. Von Willebrand Disease: Spontaneous Bleeding Episodes: Initially, factor VIII 12.5-25 IU/kg and ristocetin cofactor 25-50 IU/kg followed by factor VIII 12.5 IU/kg and ristocetin cofactor 25 IU/kg subsequently every 12- 24 hrs. Minor Surgery: Factor VIII 30 IU/kg and ristocetin cofactor 60 IU/kg daily. Major Surgery: Initially, factor VIII 30-40 IU/kg and ristocetin cofactor 60-80 IU/kg followed by factor VIII 15-30 IU/kg and ristocetin cofactor 30-60 IU/kg subsequently every 12-24 hrs. Prophylaxis: Factor VIII 12.5-20 IU/kg and ristocetin cofactor 25-40 IU/kg 3 times weekly. ii. Hemophilia A therapy: Minor haemorrage: 10-15 IU/kg every 12-24 hours. Moderate to severe haemorrhage: 15-40 IU/kg every 8 to 24 hours. Minor surgery: Loading dose 20-30 IU/kg, maintenance dose 15-30 IU/kg. Major surgery: Loading dose 40-50 IU/kg, maintenance dose 10-40 IU/kg. Prophylaxis: 25-40 IU/kg three times weekly As product may differ from one to another, it is strongly advised to refer to the manufacturer (product insert) in regards to dosing calculation.
Tranexamic Acid 100 mg/ml Injection	LP/SH SS	B		Haemorrhage associated with excessive fibrinolysis.	ADULT : Slow IV 0.5 - 1 g (10 - 15 mg/kg) tds. Continuous infusion at a rate of 25 - 50 mg/kg daily. CHILD : slow IV 10 mg/kg/day bd - tds.
Tranexamic Acid 250 mg Capsule	APPL SS	B		Haemorrhage associated with excessive fibrinolysis.	ADULT : 1 - 1.5 g (15 - 25 mg/kg) bd - qid. CHILD : 25 mg/kg/day bd - tds. Menorrhagia (initiated when menstruation has started), 1 g 3 times daily for up to 4 days; maximum 4 g daily.

3.12 LIPID-REGULATING MEDICINES

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE

Atorvastatin 20 mg Tablet	APPL SS	B		i) Hypercholesterolaemia ii) Prevention of cardiovascular disease	10 mg once daily. Maximum: 80 mg daily.
Atorvastatin 80 mg Tablet	APPL SS	A/KK		i) Hypercholesterolaemia ii) Prevention of cardiovascular disease	10 mg once daily. Maximum: 80 mg daily.
Ezetimibe 10 mg Tablet	LP/SH SS	A/KK		i) Co-administration with statins for patients who have chronic heart disease or are chronic heart disease equivalent or familial hypercholesterolaemia with target LDL-C not achieved by maximum dose of statins ii) Monotherapy in patients with documented biochemical intolerance to statins	10 mg once daily. Not recommended for children less than 10 years old.
Fenofibrate 145 mg Tablet	LP/KKM SS *Medical	A/KK		As second line therapy after failed gemfibrozil in patients: i) hypercholesterolemia and hyperglyceridemia alone or combined [type IIa, IIb, III and V dysplipidemias] in patients unresponsive to dietary and other non-pharmacological measures especially when there is evidence of associated risk factors. ii) treatment of secondary hyperlipoproteinemias if hyperlipoprotenemia persists despite effective treatment of underlying disease. iii) dyslipidemia in Type 2 Diabetes Mellitus. iv) diabetic retinopathy: indicated for the reduction in the progression of diabetic retinopathy in patients with type 2 diabetes and existing diabetic retinopathy. **Prescribing Restrictions** For indication (2): For mild to moderate non-proliferative diabetic retinopathy only.	145 mg once daily, with or without food.
Gemfibrozil 300 mg Capsule	APPL SS	A/KK		Treatment of hyperlipoprotinaemias (TYPES IIA, IIB, III, IV, V).	ADULT : 1200 mg/day in 2 divided doses, 30 minutes before breakfast and dinner. Dose range from 0.9 - 1.5 g daily.
Pravastatin Sodium 20 mg Tablet	LP/SH FPL KT	A/KK		Hypercholesterolaemia and coronary heart disease intolerant or not responsive to other forms of therapy. In health clinics, Pravastatin is restricted to HIV patients on HAART.	10 - 20 mg once daily. Maximum: 40 mg daily. In patients concomitantly taking cyclosporine, with or without other immunosuppressive drugs: Initial dose is 10 mg/day and titration to higher doses should be performed with caution. Maximum dose 20 mg/day.
Rosuvastatin 20 mg Tablet	LP/SH FPL KT *Medical	A/KK		Dyslipidaemia not responsive to atorvastatin 40 mg or equivalent doses of other statins	Initially 5-10 mg once daily (5mg in patients with pre-disposing factors to myopathy), increased if necessary at intervals of at least 4 weeks to 20 mg once daily, increased after further 4 weeks to 40 mg daily ONLY in severe hypercholesterolemia with high cardiovascular risk. Patient of Asian origin, patients on concomitant ciclosporin/fibrate and patients with risk factors for myopathy/rhabdomyolysis (including personal/family history of muscular disorders/toxicity), the maximum dose should be 20 mg daily
Simvastatin 10 mg Tablet	LP/KKM SS	B		i) Hypercholesterolaemia ii) Prevention of cardiovascular disease.	10 - 20 mg once daily. Maximum: 80 mg daily.
Simvastatin 40 mg Tablet	APPL SS	B		i) Hypercholesterolaemia ii) Prevention of cardiovascular disease.	10 - 20 mg once daily. Maximum: 80 mg daily.

3.13 MISCELLANEOUS CARDIOVASCULAR

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Alprostadil 500 mcg/ml Injection	LP/KKM FPD KT *Paediatric	A*		For treatment of congenital heart diseases which are ductus arteriosus dependent.	0.05 - 0.1 mcg/kg/min by continuous IV infusion, then decreased to lowest effective dose.

Milrinone Lactate Injection 10mg/10ml	LP/SH FPD KT *Paediatric	UKK		Inotrope and vasodilator for treatment of low cardiac output in neonates with persistent pulmonary hypertension of newborn (PPHN)	0.75mcg/kg/min IVI infusion
Pentoxifylline 400 mg Tablet	APPL SS	A/KK		Peripheral vascular disease.	400 mg 2 - 3 times daily.
Trimetazidine 20 mg Tablet	LP/KKM SS	B		Prophylactic treatment of episodes of angina pectoris.	20 mg 3 times daily.
Trimetazidine 35 mg MR Tablet	LP/KKM SS	B		Prophylactic treatment of episodes of angina pectoris.	35 mg twice daily in the morning and evening with meals.

4 RESPIRATORY

4.1 BRONCHODILATORS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Aminophylline 25 mg/ml Injection	APPL SS	B		Reversible airways obstruction, acute severe bronchospasm.	Adult: Loading dose: 6 mg/kg (ideal body weight) or 250-500 mg (25 mg/ml) by slow inj or infusion over 20-30 min. Maintenance infusion dose: 0.5 mg/kg/hr. Max rate: 25 mg/min. Children: 6 months and over (if not previously on theophylline): Loading dose: 6mg/kg. Maintenance dose: 6 mth-9 yr: 1 mg/kg/hr and 10-16 yr: 0.8 mg/kg/hr. Dosing is individualised and according to product insert/protocol
Glycopyrronium 50 mcg, Inhalation Powder Hard Capsules (Breezhaler)	LP/SH FPL KT *Medical (Dr. Hidayah) *Visiting Specialist *Dr Senthila	A/KK	**Seebri**	For maintenance bronchodilator treatment to relieve symptoms in adult patients with chronic obstructive pulmonary disease (COPD). **Prescribing Restrictions:** The diagnosis of COPD should be confirmed by spirometry.	One capsule daily. The recommended dose is the inhalation of the content of one capsule once daily using inhaler. It is recommended to be administered, at the same time of the day each day. No relevant use of glycopyrronium in pediatric population (<18 years) for COPD.
Indacaterol Maleate 110 mcg and Glycopyrronium Bromide 50mcg Inhalation Powder Hard Capsules (Breezhaler)	LP/KKM FPL KT *Medical (Dr. Hidayah) *Visiting Specialist *Dr Senthila	A/KK	**Ultibro**	As a once-daily maintenance bronchodilator treatment to relieve symptoms in adult patients with chronic obstructive pulmonary disease (COPD). ***Prescribing Restriction:*** Patients with inhaler coordination problem. (Only applies to Primary Care settings)	One capsule inhalation daily.
Indacaterol Acetate/ Glycopyrronium Bromide/ Mometasone Furoate 150/50/160mcg Inhalation Powder Hard Capsules	LP/SH FPL KT *Medical (Dr. Hidayah) *Visiting Specialist *Dr Senthila	A	**Enezair**	As a maintenance treatment of asthma in adult patients not adequately controlled with a maintenance combination of a long-acting beta2-agonist and a high dose of an inhaled corticosteroid who experienced one or more asthma exacerbations in the previous year.	one capsule to be inhaled once daily.
Budesonide / Glycopyrronium / Formoterol fumarate dihydrate 160 / 7.2 / 5 mcg per actuation Pressurised Inhalation Suspension	LP/SH FPL KT *Medical (Dr. Hidayah) **(Named-Patient Basis)	A*	**Breztri**	Maintenance treatment in adult patients with moderate to very severe chronic obstructive pulmonary disease (COPD) who are not adequately treated by a combination of an inhaled corticosteroid and a long-acting beta2-agonist or combination of a long-acting beta2-agonist and a long-acting muscarinic antagonist. ***Prescribing Restriction:*** i. To be prescribed by Consultant Respiratory Physician only. ii. Restricted to confirmed COPD cases diagnosed according to spirometry criteria.	The recommended and maximum dose is two inhalations twice daily.

Ipratropium Bromide 0.025% Inhalation Solution in unit dose vial (250 mcg/ml)	APPL SS	B		Maintenance treatment of bronchospasm associated with chronic obstructive pulmonary disease, including chronic bronchitis and emphysema. Used concomitantly with inhaled beta-agonists in the treatment of acute bronchospasm associated with chronic obstructive pulmonary disease including chronic bronchitis and asthma.	Maintenance treatment: i) Adult and adolescents over 12 years old: 500mcg per dose, 3 to 4 times daily. ii) Children 6 - 12 years old: 250mcg per dose, 3 to 4 times daily. iii) Children less than 6 years old: 100 - 250mcg per dose, 3 to 4 times daily. Acute attacks (in combination with beta-agonist): i) Adult and adolescents over 12 years old: 500mcg per dose, time interval between doses may be determined by the physician. ii) Children 6 - 12 years old: 250mcg per dose, time interval between doses may be determined by the physician. iii) Children less than 6 years old: 100 - 250mcg per dose, time interval between doses may be determined by the physician.
Ipratropium Bromide 0.5 mg & Salbutamol 2.5 mg per UDV	LP/KKM SS	B	**Combineb**	Management of reversible bronchospasm associated with obstructive airway diseases.	Acute attacks: 1 unit dose vial. In severe cases not relieved by 1 unit dose vial, 2- unit dose vials may require. Maintenance: 1 unit dose vial 3 - 4 times daily.
Ipratropium Bromide 20 mcg and Fenoterol 50 mcg/dose Inhaler	LP/KKM SS	B	Berodual-N	Management of symptoms in chronic obstructive airway disorders with reversible bronchospasm such as bronchial asthma and chronic bronchitis with or without emphysema.	ADULT & CHILD more than 6 years; Acute asthma 2 puffs. Severe cases: if breathing has not noticeably improved after 5 mins, 2 further puffs may be taken. Intermittent and long-term treatment 1-2 puffs for each administration, up to max 8 puffs/day(average: 1-2 puffs three times daily).
Salbutamol 0.5 % Inhalation Solution	APPL SS	B		Indicated for the relief of bronchospasm in patients with reversible obstructive airway disease and acute bronchospasm.	2.5 to 5mg (0.5ml – 1ml), repeat according to response and tolerability. Dosing is individualised and according to product insert/protocol
Salbutamol 0.5 mg/ml Injection	LP/SH FPD KT	A		i. Asthma and other conditions associated with reversible airways obstruction. ii. For prevention of uncomplicated premature labour.	i. 500 mcg by SC/IM injection 4 hourly or 250 mcg by slow IV. If required, by IV infusion, initially 5 mcg/min adjusted according to response and heart rate, usually in the range 3 - 20 mcg/min ii. Infusions containing 5 mg in 500 ml (10 mcg/ml) at the rate of 10 - 45 mcg/min increased at intervals of 10 minutes until evidence of patient response as shown by reduction of strength, frequency or duration of contractions; maintain rate for 1 hour after contractions have stopped, then gradually reduce by 50% every 6 hours.
Salbutamol 5 mg/5 ml Injection	LP/SH FPD KT *Paediatric **Anaes *A&E	A		i. Asthma and other conditions associated with reversible airways obstruction. ii. For prevention of uncomplicated premature labour.	i. 500 mcg by SC/IM injection 4 hourly or 250 mcg by slow IV. If required, by IV infusion, initially 5 mcg/min adjusted according to response and heart rate, usually in the range 3 - 20 mcg/min. ii. Infusions containing 5 mg in 500 ml (10 mcg/ml) at the rate of 10 - 45 mcg/min increased at intervals of 10 minutes until evidence of patient response as shown by reduction of strength, frequency or duration of contractions; maintain rate for 1 hour after contractions have stopped, then gradually reduce by 50% every 6 hours.
Salbutamol 100 mcg/dose Inhalation	APPL SS	B		Asthma and other conditions associated with reversible airways obstruction.	ADULT : 100 - 200 mcg up to 3 - 4 times daily. CHILD : 100 mcg increased to 200 mcg if necessary.
Terbutaline Sulphate 0.5 mg/ml Injection	APPL SS	B		Bronchial asthma, chronic bronchitis, emphysema & other lung diseases where broncoconstriction is a complicating factor.	SC, IM or slow IV: 250-500 mcg up to 4 times daily. CHILD 2-15 years 10 mcg/kg to a max of 300 mcg. Continuous IV infusion, as a solution containing 3-5 mcg/ml, 1.5-5 mcg/min for 8-10 hours; reduce dose for children.
Theophylline 250 mg Long Acting Tablet	LP/KKM SS	B		Reversible airways obstruction and acute severe asthma.	ADULT: 250 mg 2 times daily. CHILD under 12 years : Up to 10 mg/kg body weight 2 times daily.
Tiotropium 2.5 mcg and Olodaterol 2.5 mcg per actuation, inhalation	LP/SH FPL KT *Medical (Dr. Hidayah) *Visiting Specialist *Dr Senthila	A/KK	**Spiolto Respimat**	As a maintenance bronchodilator treatment to relieve symptoms in adult patients with chronic obstructive pulmonary disease (COPD). **Prescribing Restriction:** Patients without inhaler coordination problem (Only applies to Primary Care settings)	2 puffs once daily, at the same time of the day.

4.2 CORTICOSTEROIDS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE

Beclomethasone dipropionate 100mcg and formoterol fumarate dihydrate 6mcg pressurized inhalation solution	LP/SH FPL KT *Medical (Named-Patient Basis)	A*,A/KK	**Foster**	Prescriber category A/KK: i) Regular treatment of asthma where use of a combination product (inhaled corticosteroid and long-acting beta2 agonist) is appropriate in: a) Patients not adequately controlled with inhaled corticosteroids and "as needed" inhaled short-acting beta2 agonist, or b) Patients already adequately controlled on both inhaled corticosteroids and long-acting beta2-agonists. Prescriber category A*: ii) Treatment of COPD patients with a blood eosinophil count of 300 cells/microliter and more iii) Treatment of COPD patients with blood eosinophil count of 100 cells/microliter and more with history of repeated exacerbation despite regular treatment with long-acting bronchodilators.	For asthma, the dosage is based on treatment approach: i) Maintenance therapy (taken as regular maintenance treatment with a separate as needed rapid-acting bronchodilator): Dose recommendations for adults 18 years and above: One or two inhalations twice daily. The maximum daily dose is 4 inhalations. ii) Maintenance and reliever therapy (taken as regular maintenance treatment and as needed in response to asthma symptoms): Dose recommendations for adults 18 years and above: The recommended maintenance dose is 1 inhalation twice daily (one inhalation in the morning and one inhalation in the evening). Patients should take 1 additional inhalation as needed in response to symptoms. If symptoms persist after a few minutes, an additional inhalation should be taken. The maximum daily dose is 8 inhalations. For COPD: 2 puffs two times a day.
Budesonide 160 mcg & Formoterol 4.5 mcg Inhalation (Turbuhaler)	LP/KKM SS *Medical	A*,A/KK	**Symbicort**	Prescriber category A/KK: i) Regular treatment of asthma where use of a combination (inhaled corticosteroid and long-acting beta2-agonist) is appropriate: - Patients not adequately controlled with inhaled corticosteroids and "as needed" inhaled short-acting beta2-agonists. or - Patients already adequately controlled on both inhaled corticosteroids and long- acting beta2-agonists. ii) As a reliever treatment for mild asthma patients who do not adhere to regular inhaled corticosteroid Prescriber category A*: iii) Treatment of COPD patients with a blood eosinophil count of 300 cells/microliter and more iv) Treatment of COPD patients with blood eosinophil count of 100 cells/microliter and more with history of repeated exacerbation despite regular treatment with long-acting bronchodilators.	i) Asthma Maintenance therapy: Adult ≥18 yr 160 mcg to 320 mcg bd. Some patients may require up to a max of 640 mcg bd. Adolescent 12-17 yr 160 mcg to 320 mcg bd. Childn 6-11 yr 160 mcg bd, <6 yr Not recommended. Maintenance & relief Adult and adolescent ≥12 yr 320 mcg/day either as 160 mcg bd or 320 mcg od either morning or evening. For some patients a maintenance dose of 320 mcg bd may be appropriate. Patients should take 160 mcg additional inhalation as needed in response to symptoms. If symptoms persist after a few minutes, an additional inhalation should be taken. Not more than 960 mcg should be taken on any single occasion. A total daily dose of more than 1280 mcg is not normally needed, however a total daily dose of up to 1920 mcg could be used for a limited period. Patients using more than 1280 mcg daily should seek medical advice, should be reassessed & their maintenance therapy reconsidered. ii) Asthma reliever-only therapy: 160 mcg as needed, but no more than 960 mcg to be taken on any single occasion. Children <12 yr: Not recommended iii & iv) COPD: Adult ≥18 yr 320 mcg bd.
Budesonide 200 mcg/dose Inhalation (MDI)	APPL SS	B		Maintenance treatment of asthma as prophylactic therapy especially if not fully controlled by bronchodilators.	ADULT: 200 - 1600 mcg daily in 2 - 4 divided doses. Maintenance with twice daily dosing. CHILD more than 7 years 200 - 800 mcg, 2 - 7 years 200 - 400 mcg.
Budesonide 1 mg/ 2 ml Nebuliser Solution	LP/SH SS	B		Treatment of asthma in patients where use of a pressurized inhaler or dry powder formulation is unsatisfactory or inappropriate.	ADULT: Initially 1 - 2 mg twice daily. CHILD 3 months - 12 years of age : 500 mcg - 1 mg. Maintenance dose : half of the above doses.
Fluticasone Propionate 125 mcg/dose Inhaler (MDI)	LP/KKM FPL KT *Paediatric	B		Prophylactic treatment for asthma.	ADULT and CHILD more than 16 years i) Mild asthma : 100 mcg - 250 mcg twice daily ii) Moderate asthma : 250 - 500 mcg twice daily iii) Severe asthma : 500 mcg - 1000 mcg twice daily. Alternatively, the starting dose of fluticasone dipropionate may be gauged at half the total daily dose of beclomethasone dipropionate or equivalent administered by inhalation.
Salmeterol 25 mcg and Fluticasone Propionate 125 mcg Inhalation (MDI)	LP/SH SS *Medical *Paediatric	A*	**Seretide Evohaler**	Regular treatment of reversible obstructive airway diseases including asthma.	ADULT and CHILD more than 12 years : 1 - 2 puff twice daily. CHILD over 4 years : 1 puff twice daily.
Salmeterol 25 mcg and Fluticasone Propionate 50 mcg Inhalation (MDI)	LP/SH FPL KT *Paediatric	A*	**Seretide Evohaler**	Regular treatment of reversible obstructive airway diseases including asthma in children, where use of lower dose of a combination (bronchodilator and inhaled corticosteroids) is appropriate. Prescribing is limited to pediatric population for the purpose of dose tapering.	CHILD more than 12 years : 2 puff twice daily. CHILD over 4 years : 2 puff twice daily No data on use for children aged under 4 years.

Salmeterol 50 mcg and Fluticasone Propionate 250 mcg Inhalation (Accuhaler)	LP/KKM SS *Medical *Paediatric	A*, A/KK	**Seretide Accuhaler**	Prescriber Category A*: i) Treatment of COPD patients with a blood eosinophil count of 300 cells/microliter and more ii) Treatment of COPD patients with blood eosinophil count of 100 cells/microliter and more with history of repeated exacerbation despite regular treatment with long-acting bronchodilators. Prescriber Category A/KK: - Regular treatment of reversible obstructive airways diseases including asthma.	ADULT and CHILD more than 12 years : 1 puff twice daily.

4.3 CROMOGLYCATE, RELATED THERAPY AND LEUKOTRIENE RECEPTOR ANTAGONISTS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Montelukast Sodium 4 mg Oral Granules	LP/SH FPL KT	A*		Asthmatics, not controlled on high dose inhaled corticosteroids more than 1600 mcg/day and with co-morbid allergic disorders. Chronic treatment of asthma.	12 months - 5years: 1 packet of 4 mg oral granules daily at bedtime.
Montelukast Sodium 10 mg Tablet	LP/SH FPL KT	A/KK		Chronic treatment of asthma and relief of symptoms of seasonal allergic rhinitis for children more than 15 years and adults.	CHILD more than 15 years and ADULT: 10 mg daily at bedtime.

4.4 RESPIRATORY STIMULANTS AND PULMONARY SURFACTANTS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Beractant Intratracheal Suspension (200 mg phospholipids in 8 ml vial)	LP/KKM FPD KT *Paediatric	A*	**Survanta**	Treatment of newborn baby with birth weight of 700 g or greater undergoing mechanical ventilation for respiratory distress syndrome, whose heart rate and arterial oxygenation are continuously monitored.	100 mg/kg (4 ml/kg) body weight intratracheally up to 4 doses in 1st 48 hours. Doses should not be given more frequently than 6 hourly. To be administered as soon as possible.
Caffeine Citrate 20 mg/mL Syrup	LP/SH FP KT	GALENICAL PRODUCT		Treatment of apnoea of maturity. Respiratory stimulation to assist extubation.	Loading dose: 20mg/kg as caffeine citrate (equivalent to 10mg/kg caffeine base). Maintenance dose: 5-10mg/kg (equivalent to 2.5-5mg/kg caffeine base) every 24 hours starting 24 hours after LD.

5 ANALGESICS

5.1 NON OPIOD ANALGESICS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Paracetamol 250 mg/5 ml Syrup	LP/SH SS	C+		Mild to moderate pain and pyrexia.	CHILD: 6 - 12 years: 250 - 500 mg per dose. Repeat every 4 - 6 hours when necessary. Maximum of 4 doses in 24 hours.
Paracetamol 125 mg Suppository	LP/SH KT FPL	C+		Symptomatic relief of fever and post operative pain whom cannot tolerate oral preparations.	ADULT & CHILDREN more than 12 years old: 500 mg - 1 g every 4-6 hours CHILD 6 - 12 years : 250 - 500 mg; 1 - 5 years : 125 - 250 mg; 3 - 11 months : 80 mg inserted every 4 - 6 hours if necessary, maximum 4 doses in 24 hours. INFANTS under 3 months should not be given Paracetamol unless advised by doctor; a dose of 10 mg/kg (5 mg/kg if jaundiced) is suitable.
Paracetamol 250 mg Suppository	LP/SH SS	B		Symptomatic relief of fever and post operative pain whom cannot tolerate oral preparations.	ADULT & CHILDREN more than 12 years old: 500 mg - 1 g every 4-6 hours CHILD 6 - 12 years : 250 - 500 mg; 1 - 5 years : 125 - 250 mg; 3 - 11 months : 80 mg inserted every 4 - 6 hours if necessary, maximum 4 doses in 24 hours. INFANTS under 3 months should not be given Paracetamol unless advised by doctor; a dose of 10 mg/kg (5 mg/kg if jaundiced) is suitable.
Paracetamol 500 mg Tablet	APPL SS	C+		Mild to moderate pain and pyrexia.	ADULT: 500 - 1000 mg every 4 - 6 hours, maximum of 4 g daily.

Paracetamol 10 mg/ml in 100 ml Solution for IV Infusion	LP/SH FPD KT *Anaes *Surgical *A&E *Pead	A		Mild to moderate pain and pyrexia.	Body Weight (BW) ≤ 10 kg: 7.5 mg/kg, max: 30 mg/kg. BW >10 kg to ≤ 33 kg: 15 mg/kg, max 60 mg/kg not exceeding 2 g. BW>33 kg to ≤ 50 kg: 15 mg/kg, max 60 mg/kg not exceeding 3 g. BW >50 kg (with risk of hepatotoxicity): 1 g, max 3 g. BW >50 kg (without risk of hepatotoxicity): 1 g, max 4 g OR as in the product leaflet.
Parecoxib Sodium 40 mg Injection	LP/SH FPD KT *Anaes *Surgical *Ortho	A*		Management of post operative pain in the immediate post operative setting only.	40 mg followed by 20 or 40 mg every 6 to 12 hours, as required. Use limited to two days only with a maximum dose of 80 mg/day. Reduce the initial dose by 50% in elderly less than 50 kg.

5.2 OPIOD ANALGESICS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Fentanyl Citrate 50 mcg/ml Injection	APPL SS/DD	A		Short duration analgesia during pre-medication induction and maintenance of anaesthesia, and in the immediate post-operative period.	Dose should be individualized according to age, body weight, physical status, underlying pathological conditions, type of surgery and anaesthesia. ADULT: Premedication: IM 50 - 100 mcg, 30 - 60 mins prior to surgery. Adjunct to general anaesthesia: Induction IV 50 - 100mcg, repeat 2 - 3 mins intervals until desired effect is achieved. IV/IM 25 - 50 mcg in elderly and poor risk patients. Maintenance: IV/IM 25 - 50 mcg. Adjunct to regional anaesthesia: IM/slow IV 50 - 100 mcg when additinal analgesia is required. Post- operatively (recovery room): IM 50 - 100 mcg for pain control, tachypnoea and emergency delirium. May be repeated in 1- 2 hours as needed. CHILD (2 - 12 years): Induction & maintenance: 2 - 3 mcg/kg.
Morphine Sulphate 10 mg/ml Injection	APPL SS/DD	B		i) For moderate to severe pain especially that associated with neoplastic disease ii) As an analgesic adjunct in general anaesthesia.	ADULT: 5 to 20 mg every 4 hours, intravenously (IV or IM), 2.5 to 15mg should be given by slow injection. CHILD: - Adjusted according to body weight, 0.1 – 0.2 mg /kg every 4 hours. No dose should exceed 15 mg. - Analgesic Indication (i) subcutaneous, 100 mcg to 200 mcg (0.1 to 0.2 mg) per kg of body weight every four hours as needed, not to exceed 15mg per dose. Indication (ii) Intravenous, 50 to 100 mcg (0.05 mg to 0.1 mg) per kg of body weight, administered very slowly.
Morphine HCl 10 mg/5 ml Solution	LP/SH FP KT	GALENICAL PRODUCT		For use in management of moderate to severe pain especially that associated with neoplastic disease.	5 - 20 mg or more regularly every 4 hours as needed in terminal pain.
Oxycodone HCl 5mg Immediate Release Capsules	LP/SH FPD KT/DD *Anaes *Inpatient only	A*		i) Management of moderate to severe chronic cancer pain non-responsive to morphine in accordance with WHO step-wise ladder of chronic pain management ii) As a step-down analgesic drug in post-operative procedures iii) As a second line treatment of chronic non-cancer pain when treatments with adjuvant analgesics and non-pharmacological approach failed (Initiated by Pain, Palliative Specialists and geriatricians only)	Initially 5 mg every 4 to 6 hours, increased if necessary according to severity of pain. Usual max. 400 mg daily, but some patients may require higher doses
Pethidine HCl 100 mg/2 ml Injection	APPL SS/DD	B		For relief of moderate to severe pain (medical and surgical), pre-anaesthetic medication and obstetrical analgesia.	ADULT : 0.5 - 2 mg/kg SC or IM every 3-4 hrs if necessary. CHILD : by IM 0.5 - 2 mg/kg. Up to 1 yr : 1- 2 mg/kg weight IM, 1 - 5 yrs : 12.5 - 25 mg IM, 6 - 12 yrs : 25 - 50 mg IM.
Pethidine HCl 50 mg/ml Injection	APPL SS/DD	B		For relief of moderate to severe pain (medical and surgical), pre-anaesthetic medication and obstetrical analgesia.	ADULT : 0.5 - 2 mg/kg SC or IM every 3-4 hrs if necessary. CHILD : by IM 0.5 - 2 mg/kg. Up to 1 yr : 1- 2 mg/kg weight IM, 1 - 5 yrs : 12.5 - 25 mg IM, 6 - 12 yrs : 25 - 50 mg IM.

Remifentanil 5 mg Injection	LP/SH FPD KT/DD	A*		i) As an analgesic agent for use during induction and/or maintenance of general anaesthesia during surgical procedures including cardiac surgery ii) Continuation of analgesia into the immediate post-operative period under close supervision, during transition to longer acting analgesia iii) Provision of analgesia and sedation in mechanically ventilated intensive care patients.	For IV use only. ADULT: Induction: Bolus infusion: 1 µg/kg over 30-60 seconds; Continuous infusion: 0.5-1 µg/kg/min; Maintenance: Continuous infusion: 0.025 to 2 µg/kg/min. CHILD (1-12 years of age): Induction: Insufficient data; Neonates: IV infusion 0.4-1.0 mcg/kg/minute depending on the anaesthetic method and adjust according to patient response, supplemental IV inj of 1 mcg/kg dose may be given. 1-12 year: initially 0.1-1 mcg/kg by IV inj over at least 30 seconds (excluded if not needed), followed by IV infusion 0.05-1.3 mcg/kg/min depending on the anaesthetic method and adjust according to patient response, supplemental IV bolus inj may be admin during infusion. 12-18 year: 0.1-1 mcg/kg IV inj over at least 30 seconds (excluded if not needed), followed by IV infusion of 0.05-2 mcg/kg/min depending on anaesthetic method and adjust according to patient response, supplemental IV bolus inj may be admin during infusion.
Tramadol HCl 50 mg Capsule	LP/KKM SS	A/KK		Moderate to severe acute or chronic pain (eg. Post-operative pain, chronic cancer pain and analgesia/pain relief for patients with impaired renal function).	ADULT: 50 mg initially, can take another 50 mg after 30 - 60 min if pain not relieved. Max 400 mg daily. CHILD: 1 mg/kg/dose repeated every 6 hours (Max: 2 mg/kg/dose and 100 mg/dose).
Tramadol HCl 50 mg/ml Injection	LP SS	A/KK		Moderate to severe acute or chronic pain (eg. Post-operative pain, chronic cancer pain and analgesia/pain relief for patients with impaired renal function).	ADULT: IV/IM/SC 50 - 100mg. (IV inj over 2-3 min or IV infusion). Initially 100 mg then 50 - 100 mg every 4 - 6 hours. Max: 400 mg daily. CHILD (1 year and above): 1 - 2mg/kg/dose.

5.3 NON-STEROIDAL ANTI-INFLAMMATORY MEDICINES (NSAIDS)

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Diclofenac 1% Gel	LP/SH SS *Ortho *A&E	A		Post-traumatic inflammation of the tendons, ligaments & joints. Localised forms of soft tissue rheumatism and degenerative rheumatism.	Apply 3 - 4 times daily and gently rubbed in.
Diclofenac 12.5 mg Suppository	LP/SH FPD KT	A		Pain and inflammation in rheumatic disease and juvenile arthiritis.	ADULT: 100 mg usually at night, max total daily dose 150 mg. CHILD ABOVE 1 YEAR AND ADOLESCENT: 0.5-2mg/kg daily divided to 2-3 doses. Maximum dose for juvenile RA is 3mg/kg/day in divided doses
Diclofenac Sodium 50 mg Suppository	LP/SH FPD KT *Anaes	A		Pain and inflammation in rheumatic disease and juvenile arthiritis.	ADULT: 100 mg usually at night, max total daily dose 150 mg. CHILD ABOVE 1 YEAR AND ADOLESCENT: 0.5-2mg/kg daily divided to 2-3 doses. Maximum dose for juvenile RA is 3mg/kg/day in divided doses
Diclofenac Sodium 50 mg Tablet	LP/SH SS	B		Pain and inflammation in rheumatic disease and of non-rheumatic origin	ADULTS: Initial dose of 150 mg daily. Mild or long term: 75 - 150 mg dly in 2 to 3 divided doses after food. Maximum 200 mg/day. PAEDS more than 6 months : 1 - 3 mg/kg body weight daily in divided doses. Maximum 3 mg/kg/day (Max 150 mg/day).
Diclofenac Sodium 75 mg/3 ml Injection	LP/SH SS	A/KK		Pain and inflammation in rheumatic disease and of non-rheumatic origin	IM 75 mg once daily (2 times daily in severe cases) for not more than 2 days. Max 150 mg/day. Not suitable for children.
Ibuprofen 200 mg Tablet	APPL SS	B		Pain and inflammation in rheumatic disease.	ADULT : 200 - 400 mg 3 times daily after food, maximum 3.2 g daily. CHILD : 30-50 mg/kg body weight daily in divided doses, maximum 2.4g daily. Lowest effective dose for the shortest possible duration.
Indomethacin 25mg Capsule	LP/SH FPL KT *Ortho	B		Pain and inflammation in rheumatic disease	50 - 200 mg daily in divided doses, with food. Child not recommended.
Mefenamic Acid 250 mg Capsule	APPL SS	C		Mild to moderate pain.	ADULT: 250 - 500 mg 3 times daily after meals.

5.4 NEUROPATHIC PAIN ANALGESICS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE

Methyl Salicylate 25% Ointment	APPL FPL KT *Surgical *Ortho *A&E	C+		Relief of minor aches and pains of muscles and joints associated with simple backache, arthritis and rheumatic conditions.	Apply to the affected area, 3-4 times daily.

6 PSYCHIATRY

6.1 HYPNOTICS AND ANXIOLYTICS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Alprazolam 0.5 mg Tablet	LP/SH FPD KT/DD	A		Anxiety disorders.	0.25 - 0.5 mg 3 times daily (elderly or delibitated 0.25 mg 2-3 times daily), increased if necessary to a total dose of 3 mg/day. Not recommended for children.
Bromazepam 3 mg Tablet	LP/SH FPL KT/DD	A		Anxiety disorders.	Adult: Initially, 6-18 mg daily in divided doses. Doses up to 60 mg daily have been used. Elderly: Max initial dose: 3 mg daily.
Chloral Hydrate 200 mg/5 ml Mixture	GALENICAL PRODUCT			Preoperative sedation.	ADULT : 0.5 - 1 g (max 2 g) with plenty of water at bedtime. CHILD : Neonate: 30-50 mg/kg; up to 100 mg/kg may be used with respiratory monitoring. 1 mth-12 yr: 30-50 mg/kg (max: 1 g); up to 100 mg/kg (max: 2 g) may be used; 12-18 yr: 1-2 g. Doses to be taken 45-60 minutes before procedure. May be given rectally if oral route is not available.
Lemborexant 5 mg Film Coated Tablet	LP/SH FPL KT *Psychiatric **(Named-Patient Basis)	UKK		Treatment of adult patient with insomnia, characterized by difficulties with sleep onset/ sleep maintenance.	1.25mg ON 5MG OD
Zolpidem Tartrate 10 mg Tablet	LP/SH FPL KT/DD	A		For treatment of insomnia.	ADULT: 10mg daily at bedtime ELDERLY OR DEBILITATED SUBJECTS: 5mg daily at bed time Max. dose: 10mg daily.

6.2 ANTIPSYCHOTICS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Amisulpride 100 mg Tablet	LP/KKM SS	A*		Treatment of psychoses, particularly acute or chronic schizophrenia disorders characterized by positive symptoms (e.g. delusion, hallucinations, thought disorders) and/or negative symptoms (e.g. blunted emotions, emotional and social withdrawal) including when the negative symptoms predominate.	Predominantly negative episodes: 50-300 mg once daily adjusted according to the patient's response. Mixed episodes with positive and negative symptoms: 400-800 mg/day in 2 divided doses adjusted according to the patient's response. Should be taken on an empty stomach (Preferably taken before meals).
Amisulpride 400 mg Tablet	LP/KKM SS	A*		Treatment of psychoses, particularly acute or chronic schizophrenia disorders characterized by positive symptoms (e.g. delusion, hallucinations, thought disorders) and/or negative symptoms (e.g. blunted emotions, emotional and social withdrawal) including when the negative symptoms predominate.	Predominantly negative episodes: 50-300 mg once daily adjusted according to the patient's response. Mixed episodes with positive and negative symptoms: 400-800 mg/day in 2 divided doses adjusted according to the patient's response. Should be taken on an empty stomach (Preferably taken before meals).
Aripiprazole 10 mg Tablet	LP/KKM SS	A*		i) Treatment of acute episodes of schizophrenia and for maintenance of clinical improvent during continuation therapy. ii) Treatment of acute manic episodes associated with bipolar 1 disorder.	i) Schizophrenia: 10 or 15 mg/day. Maintenance dose: 15 mg/day. ii) Bipolar mania: Starting dose: 15 or 30 mg/day. Dose adjustment should occur at intervals of not less than 24 hour.

Aripiprazole 400 mg powder and solvent for prolonged-release suspension for injection	LP/SH FPL KT *Psychiatric	A*		Maintenance treatment of schizophrenia in adult patients stabilized with oral aripiprazole. **Prescribing Restriction:** As second-line therapy among patients with poor or uncertain adherence to oral antipsychotics.	Recommended starting and maintenance dose is 400 mg to be administered once monthly as a single injection (no sooner than 26 days after the previous injection). After the first injection, treatment with 10 mg to 20 mg oral aripiprazole should be continued for 14 consecutive days to maintain therapeutic aripiprazole concentrations during initiation of therapy.
Asenapine 10 mg Sublingual Tablet	LP/SH FPL KT	A*		For second or third line treatment in adult for: i) Schizophrenia ii) Bipolar Disorder - Monotherapy: Acute treatment of manic or mixed episodes associated with Bipolar I disorder. - Adjunctive therapy: As adjunctive therapy with either lithium or valproate for the acute treatment of manic or mixed episodes associated with Bipolar I Disorder.	i) Schizophrenia: - Acute treatment in adults: Recommended starting and target dose of asenapine is 5 mg given twice daily. - Maintenance dose: 5 mg twice daily. ii) Bipolar Disorder: - Monotherapy: 10 mg twice daily. Adjunctive therapy: 5 mg twice daily with lithium or valproate. Dose can be increased to 10 mg twice daily based on clinical response.
Brexpiprazole 4mg Tablet	LP/SH FPL KT *Psychiatric**(Named-Patient Basis)*	UKK	Lundbeck	Treatment of schizophrenia (UKK)	4mg OD
Chlorpromazine HCl 100 mg Tablet	APPL SS	B		i) Psychotic conditions ii) Anti-emetic.	ADULT: Initial: 25-50mg two- three times daily Maintenance: 25-100mg two- three times daily CHILD: Not recommended Dosing is according to product insert/ protocol.
Chlorpromazine HCl 25 mg Tablet	LP/SH FPL KT *Psychiatric *Anaes	B		i) Psychotic conditions ii) Anti-emetic.	ADULT: Initial: 25-50mg two- three times daily Maintenance: 25-100mg two- three times daily CHILD: Not recommended Dosing is according to product insert/ protocol.
Clozapine 100 mg Tablet	LP/KKM SS	A		Treatment of resistant schizophrenia.	Initial dose : 12.5 mg (once or twice) daily, increase slowly in steps of 25 - 50 mg up to 300 mg daily within 2 - 3 weeks. Maximum 900 mg/day.
Clozapine 25 mg Tablet	LP/KKM SS	A		Treatment of resistant schizophrenia.	Initial dose : 12.5 mg (once or twice) daily, increase slowly in steps of 25 - 50 mg up to 300 mg daily within 2 - 3 weeks. Maximum 900 mg/day.
Flupenthixol Decanoate 20 mg/ml Injection	APPL SS	B		Chronic psychoses.	By deep IM, initial test dose of 5-20 mg, then after at least 7 days. 20 - 40 mg repeated at intervals of 2 - 4 weeks. Maximum 400 mg weekly. Usual maintenance dose 50 mg every 4 weeks to 300 mg every 2 weeks. ELDERLY, initially quarter to half adult dose. CHILD not recommended. Deep IM recommended. Not for IV use.
Fluphenazine Decanoate 25 mg/ml Injection	APPL SS	B		Long term management of psychotic disorders.	By deep IM : Test dose 12.5 mg (6.25 mg in ELDERLY), then after 4-7 days 12.5 mg-100 mg repeated at intervals of 14-35 days, adjusted according to response. CHILD not recommended.
Haloperidol 1.5 mg Tablet	APPL SS	B		i) Psychotic disorder – management of acute and chronic psychotic disorders including schizophrenia, manic states and drug-induced psychoses ii) Management of aggressive and agitated patients, including patients with chronic brain syndrome or mental retardation. iii) Gilles de la Tourette's syndrome - for the control of tics and vocalisations of Tourette's syndrome in children and adults.	ADULT: moderate symptoms: 0.5mg to 2.0mg bid/tid; severe symptoms, chronic or resistant: 3.0mg to 5.0mg bid/ tid Geriatric / dehabilitated : 0.5mg to 2.0mg bid/tid maximum up to 100mg daily CHILD: 3-13 years old (15 to 40 kg): 0.5mg/day increase by 0.5mg at 5 to 7 days in bid/tid, dosing range 0.05mg/kg/day to 0.15mg/kg/day Dosing is according to product insert.

Haloperidol 5 mg Tablet	LP/SH FPL KT	B		i) Psychotic disorder – management of acute and chronic psychotic disorders including schizophrenia, manic states and drug-induced psychoses ii) Management of aggressive and agitated patients, including patients with chronic brain syndrome or mental retardation. iii) Gilles de la Tourette's syndrome - for the control of tics and vocalisations of Tourette's syndrome in children and adults.	ADULT: moderate symptoms: 0.5mg to 2.0mg bid/tid; severe symptoms, chronic or resistant: 3.0mg to 5.0mg bid/ tid Geriatric / dehabilitated : 0.5mg to 2.0mg bid/tid maximum up to 100mg daily CHILD: 3-13 years old (15 to 40 kg): 0.5mg/day increase by 0.5mg at 5 to 7 days in bid/tid, dosing range 0.05mg/kg/day to 0.15mg/kg/day Dosing is according to product insert.
Haloperidol 5 mg/ml Injection	LP/SH FPD KT	B		Acute psychoses and mania.	ADULT: IM or IV , 2 mg - 10 mg then every 4 - 8 hours according to response to total maximum 18 mg daily. Use in CHILD is not recommended.
Lithium Carbonate 300 mg Tablet	LP/SH FPL KT	A		i) Prophylaxis and treatment of acute mania and hypomania episodes. ii) Prophylaxis of manic depression in bipolar illness or bipolar depression and recurrent depression.	Dose depends on the preparation used. Doses should be adjusted to produce a serum-lithium concentration of 0.4-1 mmol/l.
Lurasidone Hydrochloride 20mg Film-Coated	LP/SH FPL KT *Psychiatric **(Named-Patient Basis)	UKK		bipolar mood disorder	20 mg ON
Olanzapine 10 mg Tablet	LP/KKM SS	B		i) Acute and maintenance treatment of schizophrenia and other psychoses where positive and or negative symptoms are prominent ii) Short-term use for acute mania episodes associated with Bipolar 1 disorder iii) Prevention of recurrence of manic, mixed or depressive episodes in Bipolar I Disorder.	i) 5 - 10 mg once daily, increase to 10 mg once daily within 5 - 7 days, adjust by 5 - 10 mg/day at 1 week intervals, maximum 20 mg/day ii) 10 - 15 mg once daily, increase by 5 mg/day at intervals of not less than 24 hours. Maintenance 5 - 20 mg/day; maximum 20 mg/day iii) Starting dose is 10mg/day, daily dosage may subsequently be adjusted on the basis of individual clinical status within the range 5-20 mg/day
Olanzapine 10 mg Disintegrating Tablet	LP/SH FPL KT	A*	Zyprexa Zydis	i) Acute and maintenance treatment of schizophrenia and other psychoses where positive and or negative symptoms are prominent ii) Short-term use for acute mania episodes associated with Bipolar 1 disorder iii) Prevention of recurrence of manic, mixed or depressive episodes in Bipolar I Disorder. **Prescribing Restriction:**Consultant/specialists for specific indications only, including Geriatricians	i) 5 - 10 mg once daily, increase to 10 mg once daily within 5 - 7 days, adjust by 5 - 10 mg/day at 1 week intervals, maximum 20 mg/day ii) 10 - 15 mg once daily, increase by 5 mg/day at intervals of not less than 24 hours. Maintenance 5 - 20 mg/day; maximum 20 mg/day iii) Starting dose is 10mg/day, daily dosage may subsequently be adjusted on the basis of individual clinical status within the range 5-20 mg/day
Olanzapine 5 mg Tablet	LP/KKM SS	B		i) Acute and maintenance treatment of schizophrenia and other psychoses where positive and or negative symptoms are prominent ii) Short-term use for acute mania episodes associated with Bipolar 1 disorder iii) Prevention of recurrence of manic, mixed or depressive episodes in Bipolar I Disorder.	i) 5 - 10 mg once daily, increase to 10 mg once daily within 5 - 7 days, adjust by 5 - 10 mg/day at 1 week intervals, maximum 20 mg/day ii) 10 - 15 mg once daily, increase by 5 mg/day at intervals of not less than 24 hours. Maintenance 5 - 20 mg/day; maximum 20 mg/day iii) Starting dose is 10mg/day, daily dosage may subsequently be adjusted on the basis of individual clinical status within the range 5-20 mg/day
Olanzapine 5 mg Disintegrating Tablet	LP/SH FPL KT	A*	Zyprexa Zydis	i) Acute and maintenance treatment of schizophrenia and other psychoses where positive and or negative symptoms are prominent ii) Short-term use for acute mania episodes associated with Bipolar 1 disorder iii) Prevention of recurrence of manic, mixed or depressive episodes in Bipolar I Disorder. **Prescribing Restriction:**Consultant/specialists for specific indications only, including Geriatricians	i) 5 - 10 mg once daily, increase to 10 mg once daily within 5 - 7 days, adjust by 5 - 10 mg/day at 1 week intervals, maximum 20 mg/day ii) 10 - 15 mg once daily, increase by 5 mg/day at intervals of not less than 24 hours. Maintenance 5 - 20 mg/day; maximum 20 mg/day iii) Starting dose is 10mg/day, daily dosage may subsequently be adjusted on the basis of individual clinical status within the range 5-20 mg/day

Paliperidone 6 mg Extended Released Tablet	LP/SH FPL KT *Psychiatric	A*		Second or third line treatment of schizophrenia	ADULT 6 mg once daily in the morning, adjusted if necessary; usual range 3 -12 mg daily. Renal impairment (creatinine clearance between 10-50 mL/min) 3 mg once daily. Avoid if creatinine clearance less than 10mL/min
Paliperidone 75 mg Prolonged Release Injection	LP/SH FPL KT *Psychiatric	A*		Second or third line treatment of acute and maintenance treatment of schizophrenia in adults.	Initiation: Deltoid IM 150 mg eq on Day1, followed by deltoid IM 100 mg eq on one week later. Maintenance: Monthly dose of 75 mg eq (this can be increased or decreased based on individual patient's tolerability and/or efficacy). These monthly maintenace dose can be administered in either the deltoid or gluteal muscle.
Paliperidone 100 mg Prolonged Release Injection	LP/SH FPL KT *Psychiatric	A*		Second or third line treatment of acute and maintenance treatment of schizophrenia in adults.	Initiation: Deltoid IM 150 mg eq on Day1, followed by deltoid IM 100 mg eq on one week later. Maintenance: Monthly dose of 75 mg eq (this can be increased or decreased based on individual patient's tolerability and/or efficacy). These monthly maintenace dose can be administered in either the deltoid or gluteal muscle.
Paliperidone 150 mg Prolonged Release Injection	LP/SH FPL KT *Psychiatric	A*		Second or third line treatment of acute and maintenance treatment of schizophrenia in adults.	Initiation: Deltoid IM 150 mg eq on Day1, followed by deltoid IM 100 mg eq on one week later. Maintenance: Monthly dose of 75 mg eq (this can be increased or decreased based on individual patient's tolerability and/or efficacy). These monthly maintenace dose can be administered in either the deltoid or gluteal muscle.
Paliperidone 263mg/1.315ml Prolonged-Release for Intramuscular Injection	LP/SH FPL KT *Psychiatric	A*		For the maintenance treatment of schizophrenia in adult patients who have been adequately treated with the 1-month paliperidone palmitate injectable product for at least four months.	Apply 3.5 as a dose multiplier to the previous 1-month injection dose, and administer every 3 months
Paliperidone 350 mg/1.750 ml Prolonged-Release for Intramuscular Injection	LP/SH FPL KT *Psychiatric	A*		For the maintenance treatment of schizophrenia in adult patients who have been adequately treated with the 1-month paliperidone palmitate injectable product for at least four months.	Apply 3.5 as a dose multiplier to the previous 1-month injection dose, and administer every 3 months.
Paliperidone 525mg/2.625ml Prolonged-Release for Intramuscular Injection	LP/SH FPL KT *Psychiatric	A*		For the maintenance treatment of schizophrenia in adult patients who have been adequately treated with the 1-month paliperidone palmitate injectable product for at least four months.	Apply 3.5 as a dose multiplier to the previous 1-month injection dose, and administer every 3 months
Perphenazine 4 mg Tablet	LP/SH FPL KT *Psychiatric	B		i) Treatment of psychotic disorders ii) Used in the treatment of behavioural disorders in adults, in the aged and in children	ADULT: Initially 4 mg 3 times daily adjusted according to response, maximum 24 mg daily. ELDERLY: 1/4 to 1/2 adult dose. CHILD: The lower range of the adult dosage may be used in children over 12. It should start with the smallest dose e.g 2mg, then titrate accordingly.

Quetiapine 25mg Tablet	LP/SH FPL KT *Psychiatric	UKK		Bipolar depression	i) Initial titration schedule over 4 days: 25 mg twice daily on Day 1, increase in steps of 25 - 50 mg 2 to 3 times daily on Days 2 and 3 to reach target dose of 300 - 400 mg daily by Day 4, given in 2 - 3 divided doses. Institute further dose adjustments, if indicated, at intervals of 2 days or more, in steps of 25 - 50 mg twice daily ii) 100 mg (Day 1), 200 mg (Day 2), 300 mg (Day 3) & 400 mg (Day 4). Further dosage adjustments up to 800 mg/day by Day 6 should be in increments of not more than 200 mg/day. Adjust dose within the range of 200 - 800 mg/day depending on clinical response and tolerability of the patient. Usual effective dose range: 400 - 800 mg/day iii) 50 mg ORALLY once a day on Day 1, then 100 mg once daily on Day 2, then 200 mg once daily on Day 3, then 300 mg once daily on Day 4 (all doses given at bedtime); patients requiring higher doses should receive 400 mg on Day 5, increased to 600 mg on Day 8 (week 1).
Quetiapine Fumarate 100 mg Immediate Release Tablet	LP/SH SS	A*		i) Schizophrenia ii) Short term treatment of acute manic episodes associated with bipolar I disorder, either monotherapy or adjunct to lithium or divalproex iii) Treatment of depressive episodes associated with bipolar disorder. *Prescribing Resctrictions:* *Consultant/ specialists for specific indications only, including Geriatricians and Neurologists.*	i) Initial titration schedule over 4 days: 25 mg twice daily on Day 1, increase in steps of 25 - 50 mg 2 to 3 times daily on Days 2 and 3 to reach target dose of 300 - 400 mg daily by Day 4, given in 2 - 3 divided doses. Institute further dose adjustments, if indicated, at intervals of 2 days or more, in steps of 25 - 50 mg twice daily ii) 100 mg (Day 1), 200 mg (Day 2), 300 mg (Day 3) & 400 mg (Day 4). Further dosage adjustments up to 800 mg/day by Day 6 should be in increments of not more than 200 mg/day. Adjust dose within the range of 200 - 800 mg/day depending on clinical response and tolerability of the patient. Usual effective dose range: 400 - 800 mg/day iii) 50 mg ORALLY once a day on Day 1, then 100 mg once daily on Day 2, then 200 mg once daily on Day 3, then 300 mg once daily on Day 4 (all doses given at bedtime); patients requiring higher doses should receive 400 mg on Day 5, increased to 600 mg on Day 8 (week 1).
Quetiapine Fumarate 200 mg Extended Release Tablet	LP/KKM FPL KT	A*		i) Schizophrenia ii) Moderate to severe manic episodes in bipolar disorder iii) Major depressive episodes in bipolar disorder. ***Prescribing Resctrictions:*** *Consultant/ specialists for specific indications only, including Geriatricians and Neurologists.*	i) & ii) 300 mg once daily on Day 1 and 600 mg on Day 2. Maintenance dose: 400 – 800 mg once daily. Maximum dose: 800 mg daily iii) 50 mg on Day 1, 100 mg on Day 2, 200 mg on Day 3 and 300 mg on Day 4. Recommended daily dose is 300 mg. May be titrated up to 600 mg daily. In elderly or hepatic impairment: Start with 50 mg/day, may be increased in increments of 50 mg/day to an effective dose.
Quetiapine Fumarate 300 mg Extended Release Tablet	LP/KKM FPL KT	A*		i) Schizophrenia ii) Moderate to severe manic episodes in bipolar disorder iii) Major depressive episodes in bipolar disorder. *Prescribing Resctrictions:* *Consultant/ specialists for specific indications only, including Geriatricians and Neurologists.*	i) & ii) 300 mg once daily on Day 1 and 600 mg on Day 2. Maintenance dose: 400 – 800 mg once daily. Maximum dose: 800 mg daily iii) 50 mg on Day 1, 100 mg on Day 2, 200 mg on Day 3 and 300 mg on Day 4. Recommended daily dose is 300 mg. May be titrated up to 600 mg daily.
Quetiapine Fumarate 400 mg Extended Release Tablet	LP/KKM FPL KT	A*		i) Schizophrenia ii) Moderate to severe manic episodes in bipolar disorder iii) Major depressive episodes in bipolar disorder. *Prescribing Resctrictions:* *Consultant/ specialists for specific indications only, including Geriatricians and Neurologists.*	i) & ii) 300 mg once daily on Day 1 and 600 mg on Day 2. Maintenance dose: 400 – 800 mg once daily. Maximum dose: 800 mg daily iii) 50 mg on Day 1, 100 mg on Day 2, 200 mg on Day 3 and 300 mg on Day 4. Recommended daily dose is 300 mg. May be titrated up to 600 mg daily.

Risperidone 1 mg/ml Oral Solution	LP/SH FPL KT *Psychiatric	A		i) Schizophrenia, including first episode psychosis, acute schizophrenic exacerbations, chronic schizophrenia and other psychotic conditions. ii) Short-term symptomatic treatment (up to 6 weeks) of persistent aggression in conduct disorder in children from the age of 5 years and adolescents with subaverage intellectual functioning or mental retardation.	i) ADULT: Initial dose: 2 mg/day Maintenance dose: 4 to 6 mg. Max 16 mg/day. CHILD: Not recommended ELDERLY: Initial dose: 0.5 mg twice daily. Maintenance: 1 to 2 mg twice daily. ii) CHILD & ADOLESCENTS, 5-18 years ≥ 50 kg: Initial - 0.5 mg once daily Optimum dose: 1 mg once daily < 50 kg: Initial - 0.25 mg once daily Optimum dose: 0.5mg once daily Dosing should be individualized according to product insert.
Risperidone 1 mg Tablet	LP/KKM SS	B		i) Schizophrenia, including first episode psychosis, acute schizophrenic exacerbations, chronic schizophrenia and other psychotic conditions. ii) Short-term symptomatic treatment (up to 6 weeks) of persistent aggression in conduct disorder in children from the age of 5 years and adolescents with subaverage intellectual functioning or mental retardation.	i) Schizophrenia ADULT: Initial dose: 2 mg/day Maintenance dose: 4 to 6 mg. Max 16 mg/day. CHILD: Not recommended ELDERLY: Initial dose: 0.5 mg twice daily. Maintenance: 1 to 2 mg twice daily. ii) Conduct Disorder CHILD & ADOLESCENTS, 5-18 years ≥ 50 kg: Initial - 0.5 mg once daily Optimum dose: 1 mg once daily < 50 kg: Initial - 0.25 mg once daily Optimum dose: 0.5mg once daily Dosing should be individualized according to product insert.
Risperidone 2 mg Tablet	LP/KKM SS	B		Schizophrenia.	ADULT: Initial dose: 2 mg/day Maintenance dose: 4 to 6 mg. Max 16 mg/day. CHILD: Not recommended ELDERLY: Initial dose: 0.5 mg twice daily. Maintenance: 1 to 2 mg twice daily. Dosing should be individualized according to product insert.
Sulpiride 200 mg Tablet	LP/KKM SS	B		Acute and chronic psychotic disorders.	200-1000mg daily.
Trifluoperazine HCl 5 mg Tablet	APPL SS	B		i) Schizophrenia, other psychotic disorder ii) Treatment of behavioural disorders in adults and in children	ADULT: Initially 5 mg twice daily, increase by 5 mg after 1 week, then at 3-day intervals. Maximum 40 mg/day. CHILD up to 12 years: Initially up to 5 mg daily in divided doses adjusted to response, age and body weight. Elderly reduce initial dose by at least half.
Ziprasidone 60 mg Tablet	LP/SH FPL KT *Psychiatric (Named-Patient Basis)	UKK		Treatment of schizophrenia; Acute treatment as monotherapy of manic or mixed epiodes associated with bipolar I disorder; Maintenance treatment of bipolar I disorder as an adjunct to lithium or valproate.	Schizophrenia: Initiate at 20mg twice daily. Daily dosage may be adjusted up to 80mg twice daily. Dose adjustments should occur at intervals of not less than 2 days. Safety and efficacy has been demonstrated in doses up to 100 mg twice daily. The lowest effective dose should be used. Acute treatment of manic/mixed episodes of bipolar I disorder: Initiate at 40 mg twice daily. Increase to 60 mg or 80 mg twice daily on day 2 of treatment. Subsequent dose adjustments should be based on tolerability and efficacy within the range of 40–80 mg twice daily. Maintenance treatment of bipolar I disorder as an adjunct to lithium or valproate: Continue treatment at the same dose on which the patient was initially stabilized, within the range of 40–80 mg twice daily.
Zuclopenthixol 20 mg/ml Drops	LP/SH FPL KT	A*		i) Acute schizophrenia and other acute psychoses, including agitation ii) Chronic schizophrenia and other chronic psychoses iii) Mania.	i) & iii) 10-50mg daily Max. dose: 100-150mg daily in 2-3 divided doses ii) 20-40mg daily.

Zuclopenthixol Acetate 50 mg/ml Injection	LP/SH FPD KT	A*		Initial treatment of acute psychoses, including mania, and exacerbations of chronic psychoses in patients not responding to available standard drugs	50-150mg IM repeated if necessary, preferably within a time interval of 2-3 days. Additional injection may be needed 24-48 hours following the first injection
Zuclopenthixol Decanoate 200 mg/ml Injection	LP/KKM SS *Psychiatric	B	Clopixol Depot	Maintenance treatment of schizophrenia and other psychoses, especially with symptoms such as hallucinations, delusions and thought disturbances along with agitation, restlessness, hostility and aggressiveness in patients not responding to available standard drugs.	By deep IM injection test dose 100 mg followed after 7 - 28 days by 100 - 200 mg or more followed by 200 - 400 mg at intervals of 2 - 4 weeks adjusted according to response. Max. 600mg weekly. CHILD not recommended.

6.3 ANTIDEPRESSANTS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Agomelatine 25 mg Tablet	LP/SH FPL KT *Psychiatric	A*		Major depression.	The recommended dose is 25 mg once daily at bedtime, maybe increased to 50 mg once daily at bedtime.
Amitriptyline HCl 25 mg Tablet	LP/SH FPL KT	B		i. Depression ii. Nocturnal enuresis where organic pathology has been excluded	i. Initial: 25mg 3 times a day in the evening Increase gradually in the late evening or at bedtime if necessary up to a maximum of 150mg per day Hospitalised patient: 100mg per day Increase gradually to 200-300mg per day ii. CHILD 6 YEARS AND UNDER 10mg at bedtime CHILD OVER 6 YEARS Initial: 10mg at bedtime Increase gradually if necessary up to a maximum of 25mg at bedtime Not recommended for treatment of depression in children under 12 years of age. Dosing is individualised and according to product insert/ protocol.
Clomipramine HCl 25 mg Tablet	LP/SH SS *Psychiatric	A		Depression, obsessive-compulsive disorder.	Initially 10 mg daily, increased gradually as necessary to 30 - 150 mg daily in divided doses or as a single dose at bedtime; max 250 mg daily. ELDERLY initially 10 mg daily increased carefully over approximately 10 days to 30 - 75 mg daily; CHILD: ≥10 years: Initially, 25 mg daily, increased gradually over 2 week. Max: 3 mg/kg/day or 100 mg daily, whichever is smaller. Give in divided doses. Once titrated, dose may be given as a single dose at bedtime.
Desvenlafaxine 50 mg Extended Release Tablet	LP/SH FPL KT *Psychiatric	A*		Major depression.	Recommended dose is 50 mg once daily, with or without food.
Duloxetine 30 mg Capsule	LP/SH FPL KT *Psychiatric	A*		i) Major depressive disorder ii) Diabetic peripheral neuropathic pain iii) Generalised Anxiety Disorder	i) & ii) ADULT: 60 mg once daily up to a maximum dose of 120mg/day (in divided doses) CHILD and ADOLESCENT under 18 years not recommended iii) Generalised Anxiety: Initial dose: 30 mg OD with or without food Maintenance dose: 60 mg OD
Duloxetine 60 mg Capsule	LP/SH FPL KT *Psychiatric	A*		i) Major depressive disorder ii) Diabetic peripheral neuropathic pain iii) Generalised Anxiety Disorder	i) & ii) ADULT: 60 mg once daily up to a maximum dose of 120mg/day (in divided doses) CHILD and ADOLESCENT under 18 years not recommended iii) Generalised Anxiety: Initial dose: 30 mg OD with or without food Maintenance dose: 60 mg OD

Escitalopram 10 mg tablet	LP/KKM SS	B		i. Major depression ii. Treatment of panic disorder with or without agoraphobia iii. Treatment of social anxiety disorder (social phobia) iv. Treatment of obsessive-compulsive disorder (OCD) v. Treatment of generalised anxiety disorder	i. Initial: 10mg once daily. Increase gradually if necessary up to a maximum of 20mg daily ii. Initial: 5mg daily for the first week and then increase to 10mg daily Increase if necessary up to a maximum of 20mg daily ELDERLY Initial: half the adult dose, lower maximum dose should be considered iii. Usual dose: 10mg once daily Adjust as necessary based on patient response to either 5mg or up to a maximum of 20mg daily iv & v. Usual dose: 10mg once daily Adjust as necessary based on patient response up to a maximum of 20mg daily Dosing is individualised and according to product insert/ protocol. Should not be used in patients under 18 years old. If, based on clinical need, a decision to treat is nevertheless taken; the patient should be carefully monitored for appearance of suicidal symptoms.
Fluoxetine HCL 20 mg Capsule	LP/SH SS	A/KK		i) Depression ii) Obsessive-compulsive disorder.	i) 20 mg once daily increased after 3 weeks if necessary, usual dose 20 - 60 mg (ELDERLY 20 - 40 mg) once daily max 80 mg once daily (ELDERLY max 60 mg once daily). ii) Initially 20 mg once daily increased after 2 weeks if necessary, usual dose 20 - 60 mg (ELDERLY 20 - 40 mg) once daily, max 80 mg (ELDERLY max 60 mg) once daily, discontinue if no improvement within 10 weeks. CHILD and ADOLESCENT under 18 years are not recommended.
Fluvoxamine 100 mg Tablet	LP/KKM SS	B		i. Depression ii. Obsessive-compulsive disorder (OCD)	i. Initial: 50 – 100 mg per day in the evening Increase gradually if necessary up to a maximum of 300mg per day Dose over 150mg per day given in 2 – 3 divided doses Recommended dose to prevent recurrence: 100mg per day ii. ADULT Initial: 50mg per day for 3 – 4 days Increase gradually if necessary up to a maximum of 300mg per day Dose over 150mg per day given in 2 – 3 divided doses CHILD (8 years on and adolescents) Initial: 25mg per day, preferably at bedtime Increase in 25mg increments every 4 – 7 days if necessary up to a maximum of 200mg per day Dose over 50mg per day given in 2 divided doses Dosing is individualised and according to product insert/ protocol. Should not be used in patients under 18 years old except for the treatment of OCD. If, based on clinical need, a decision to treat is nevertheless taken; the patient should be carefully monitored for appearance of suicidal symptoms.
Fluvoxamine 50 mg Tablet	LP/KKM SS	B		i. Depression ii. Obsessive-compulsive disorder (OCD)	i. Initial: 50 – 100 mg per day in the evening Increase gradually if necessary up to a maximum of 300mg per day Dose over 150mg per day given in 2 – 3 divided doses Recommended dose to prevent recurrence: 100mg per day ii. ADULT Initial: 50mg per day for 3 – 4 days Increase gradually if necessary up to a maximum of 300mg per day Dose over 150mg per day given in 2 – 3 divided doses CHILD (8 years on and adolescents) Initial: 25mg per day, preferably at bedtime Increase in 25mg increments every 4 – 7 days if necessary up to a maximum of 200mg per day Dose over 50mg per day given in 2 divided doses Dosing is individualised and according to product insert/ protocol. Should not be used in patients under 18 years old except for the treatment of OCD. If, based on clinical need, a decision to treat is nevertheless taken; the patient should be carefully monitored for appearance of suicidal symptoms.

Mirtazapine 15 mg Orodispersible Tablet	APPL SS	A*		Major depression. *Prescribing Resctrictions:* *Consultant/ specialists for specific indications only, including Geriatricians and Neurologists .*	Initially 15 mg daily at bedtime increased according to response up to 45 mg daily as a single dose at bedtime or in 2 divided doses. CHILD and ADOLESCENT under 18 years not recommended.
Mirtazapine 30 mg Orodispersible Tablet	APPL SS	A*		Major depression. *Prescribing Resctrictions:* *Consultant/ specialists for specific indications only, including Geriatricians and Neurologists.*	Initially 15 mg daily at bedtime increased according to response up to 45 mg daily as a single dose at bedtime or in 2 divided doses. CHILD and ADOLESCENT under 18 years not recommended.
Sertraline HCL 50 mg Tablet	LP/SH SS	B		i. Major depression ii. Obsessive-compulsive disorder (OCD) iii. Panic disorder iv. Social anxiety disorder (social phobia) v. Post-traumatic stress disorder	i. Initial: 50mg per day Titration: 50mg increments at intervals of at least a week Max: 200mg per day ii. Initial: 50mg per day Titration: 50mg increments at intervals of at least a week Max: 200mg per day Therapeutic dose range: 50 – 200 mg per day iii, iv & v: Initial: 25mg per day. Increase to 50mg per day after 1 week. Titration: Adjust dose at intervals of at least a week Max: 200mg per day Dosing is individualised and according to product insert/ protocol. Should not be used in patients under 18 years old except for the treatment of OCD. If, based on clinical need, a decision to treat is nevertheless taken; the patient should be carefully monitored for appearance of suicidal symptoms.
Venlafaxine HCl 75 mg Extended Release Capsule	LP/SH FPL KT	A*		i) Depression. ii) Genaralized anxiety disorder. iii) Social anxiety disorder (social phobia). iv) Panic disorder.	i), ii) & iii) ADULT: 75 mg once daily. May increase dose by 75 mg/day every 4 days for maximum dose of 225 mg/day. iv) 37.5 mg/day for the first 4 - 7 days after which the dose should be increased to 75 mg once daily. CHILD and ADOLESCENT under 18 years not recommended.
Venlafaxine HCl 150 mg Extended Release Capsule	LP/SH FPL KT	A*		i) Depression. ii) Genaralized anxiety disorder. iii) Social anxiety disorder (social phobia). iv) Panic disorder.	i), ii) & iii) ADULT: 75 mg once daily. May increase dose by 75 mg/day every 4 days for maximum dose of 225 mg/day. iv) 37.5 mg/day for the first 4 - 7 days after which the dose should be increased to 75 mg once daily. CHILD and ADOLESCENT under 18 years not recommended.
Vortioxetine 10 mg Tablet	LP/SH FPL KT *Psychiatric *Medical (Geriatric)	A*		Treatment of major depressive episodes in adults. *Prescribing Resctrictions:* *Consultant/ specialists for specific indications only, including Geriatricians and Neurologists.*	ADULT Initially 10 mg once daily, may be increased to max: 20 mg once daily or decreased to min: 5 mg once daily. ELDERLY Initially 5 mg once daily.

6.4 MISCELLANEOUS PSYCHIATRY

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Methylphenidate HCl 10 mg Tablet	LP/KKM SS	A	Ritalin	Attention deficit hyperactivity disorder (ADHD).	CHILD over 6 years, initially 5 mg 1 - 2 times daily, increased if necessary at weekly intervals by 5 - 10 mg daily to max. 60 mg daily in divided doses; discontinue if no response after 1 month, also suspend periodically to assess child's condition (usually finally discontinued during or after puberty).
Methylphenidate HCl 20 mg LA Capsule	LP/SH FPL KT **(Named-Patient Basis)	A*	Ritalin LA	Attention deficit hyperactivity disorder (ADHD)	20 mg once daily to be taken in the morning. Dosage be adjusted in increments to a maximum of 60 mg/day

7 NEUROLOGY

7.1 ANTIMIGRAINE MEDICINES

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Flunarizine HCl 5 mg Capsule	LP/SH FPL KT	B		i) Migraine prophylaxis ii) Maintenance treatment of vestibular disturbances and of cerebral and peripheral disorders.	i) ADULT: 5 - 10 mg daily preferably at night. ELDERLY > 65 years : 5 mg at night. Maintenance 5-day treatment at the same daily dose. ii) 5 - 10 mg at night. If no improvement after 1 month, discontinue treatment.

7.2 ANTIEPILEPTICS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Carbamazepine 100 mg/5 ml (2% w/v) Syrup	LP/SH FPL KT	A		Epilepsy.	ADULT: Initially, 100-200 mg once or twice daily gradually increased by increments of 100-200 mg every 2 week. Maintenance: 0.8-1.2 g daily in divided doses. Max: Adult: 1.6 g daily CHILD: 10-15 years: 0.6-1 g daily 5-10 years: 400-600 mg daily 1-5 years: 200-400 mg daily less than or equal to 1 year: 100-200 mg daily. Alternatively, 10-20 mg/kg body weight daily in divided doses.
Carbamazepine 200 mg CR Tablet	LP/KKM SS	A		Epilepsy.	ADULT: Initial, 200 mg twice daily for the first week, may increase dosage by 200 mg/day at weekly intervals until optimal response is obtained. Maximum 1.6 g/day. CHILD: usual maximum dosage 1000 mg/day in children 12-15 years of age, 1200 mg/day in patients above 15 years of age.
Carbamazepine 200 mg Tablet	APPL SS	B		i) Epilepsy ii) Trigeminal neuralgia.	i) ADULT: 100 - 200 mg 1 - 3 times daily increased gradually to usual dose of 0.8 - 1.2 g daily in divided doses. CHILD: Up to 1 year: 100 - 200 mg daily; 1 - 5 years: 200 - 400 mg daily; 5 - 10 years: 400 - 600 mg daily; 10 - 15 years: 0.6 - 1 g daily ii) The initial dosage of 200 to 400 mg should be slowly raised daily until freedom from pain is achieved (normally at 200 mg 3 to 4 times daily). The dosage should then be gradually reduced to the lowest possible maintenance level. In ELDERLY patients, an initial dose of 100 mg twice daily is recommended.
Clobazam 10 mg Tablet	LP/SH FPL KT/DD *Paediatric	A*		As adjunctive therapy in patients with epilepsy not adequately stabilised with their basic medication.	The initial dose in ADULTS and ADOLESCENTS >15 year should be low (5 to15 mg daily), if necessary, increased gradually to a maximum daily dose of about 80 mg. Doses of up to 30 mg may be taken as a single dose in the evening. The initial dose in CHILDREN from 3 to15 year is normally 5 mg. A maintenance dose of 0.3 to 1.0 mg/kg body weight daily is usually sufficient.
Clonazepam 2 mg Tablet	APPL SS/DD	B		i) Epilepsy ii) Non-epileptic myoclonus.	i) & ii) ADULT: Initial dose should not exceed 1.5 mg/day divided into 3 doses, may be increased in increments of 0.5 mg every 3 days until seizures are controlled. Maintenance dose: 3-6 mg/day. Maximum: 20 mg/day. CHILD up to 10 years: initial dose 0.01-0.03 mg/kg/day in 2-3 divided doses, increased by no more than 0.25-0.5 mg every third day, maximum 0.2 mg/kg/day. CHILD 10- 16 years: initial dose 1- 1.5 mg/day in 2-3 divided dose, may be increased by 0.25-0.5 mg every third day until individual maintenance dose of 3- 6 mg/day is reached.
Diazepam 5 mg/ml Injection	APPL SS/DD	B		i) Status epilepticus ii) Skeletal muscle spasm iii) Anxiety disorders.	i) ADULT: initial dose 10-20mg IV, in the following hours 20mg IM or by intravenous drip infusion as necessary. CHILD 2 to 5 years of age: slow IV 0.2 - 0.5mg every two to five minutes up to a maximum of 5mg. If necessary, dose can be repeated in two to four hours. CHILD 5 years and older: slow IV 1mg every two to five minutes up to a maximum of 10mg. If necessary, dose can be repeated in two to four hours. ii) ADULT: 10mg once or twice IV. CHILD 2 to 5 years of age: IM or IV, 1 to 2mg the dosage being repeated every three to four hours as needed. CHILD 5 years and older: IM or IV, 5 to 10mg, the dosage being repeated every three to four hours as needed. iii) ADULT: 10-20mg three times daily IM or IV until acute symptoms subside.

Diazepam 5 mg Rectal Solution	APPL FPD KT/DD	B		Status epilepticus, skeletal muscle spasm.	Status epilepticus - ADULT: 0.5 mg/kg repeated after 12 hours if necessary. CHILD (febrile convulsions, prolonged or recurrent): 0.5 mk/kg (max 10 mg), repeated if necessary. Not recommended for children below 2 years.
Gabapentin 300 mg Capsule	LP/KKM SS	A*, A/KK		**PRESCRIBER CATEGORY A***: Add-on therapy for intractable partial epilepsy, refractory to standard anti-epileptic drugs. **PRESCRIBER CATEGORY A/KK**: Treatment of various types of neuropathic pain, both peripheral (which includes diabetic neuropathy, post-herpetic neuralgia, trigeminal neuralgia) in adult more than 18 years.	ADULT & CHILD > 12 yrs: 900-3600 mg/day. Therapy may be initiated by administered 300 mg TDS on day 1, or by titrating the dose as: 300 mg once on day 1, 300 mg BD on day 2, 300 mg TDS on day 3. Thereafter, may be increased in 3 equally divided doses up to max 3600 mg/day.CHILD 3-12 yr: Initially 10-15 mg/kg/day in 3 divided dose. Effective dose: CHILD 3 to less than 5 yrs: 40 mg/kg/day in 3 divided doses, CHILD 5-12 yrs: 25-35 mg/kg/day in 3 divided doses ii) ADULT: 900 mg/day in 3 equally divided doses. Max 3600 mg/day.
Lamotrigine 50 mg Tablet	LP/KKM SS	A		i) Adjunctive or monotherapy for partial seizures & generalised tonic-clonic seizures not satisfactorily controlled with other antiepileptic drugs. ii) Prevention of mood episodes in adult 18 years and above with bipolar disorder, predominately by preventing depressive episodes.	i) Up to 200 mg daily in single or divided dosage ii) 25- 200 mg daily.
Levetiracetam 100 mg/ml Injection	LP/SH FPD KT *Pead *Medical	A*		i) Monotherapy therapy in the treatment of partial onset seizures with or without secondary generalization in patients from age 16 years of age with newly diagnosed epilepsy ii) Adjunctive treatment in partial onset seizures with or without secondary generalization in adults and children from 4 years of age with epilepsy; juvenile myoclonic epilepsy and idiopathic generalized tonic clonic epilepsy from 12 years of age. *Prescribing Restrictions:To be initiated when conventional IV antiepileptic drugs failed to achieve control, or oral form is temporarily not feasible in seizure emergencies*	i) ADULTS and ADOLESCENT (from 16 years): Starting dose: 250 mg twice daily, Increase dose to 500 mg twice daily after 2 week. Dose can be further increased by 250 mg twice daily every 2 weeks depending upon the clinical response. Max: 1500 mg twice daily. ii) ADULT more than 18 years and ADOLESCENT (12 to 17 years) more than or equal to 50 kg: Initially 500 mg twice daily may be increased up to 1500 mg twice daily. Dose changes can be made in 500 mg twice daily increments or decrements 2 to 4 weekly. CHILD (4 to 11 years) and ADOLESCENT (12 to 17 years) less than 50 kg : Initially 10 mg/kg twice daily, may be increased up to 30 mg/kg twice daily. Dose changes should not exceed increments or decrements of 10 mg/kg twice daily every 2 weeks. CHILD more than or equal to 50 kg: Adult dose
Levetiracetam 100 mg/ml Oral Solution	LP/SH FPL KT *Paediatric	A*		As adjunctive therapy in the treatment of partial onset seizures with or without secondary generalization in adults and children from 4 years of age with epilepsy.	CHILD: 4-11 years and adolescent (12-17 years) less than 50 kg: Initially 10 mg/kg twice daily, may be increased up to 30 mg/kg twice daily. Dose changes should not exceed increments or decrements of 10 mg/kg two times daily twice weekly.
Levetiracetam 500 mg Tablet	LP/KKM FPL KT *Paediatric *Medical	A*		i) Monotherapy therapy in the treatment of partial onset seizures with or without secondary generalization in patients from age 16 years of age with newly diagnosed epilepsy. ii) Adjunctive treatment in partial onset seizures with or without secondary generalization in adults and children from 4 years of age with epilepsy; juvenile myoclonic epilepsy and idiopathic generalized tonic clonic epilepsy from 12 years of age.	i) Monotherapy ADULTS and ADOLESCENT (from 16 years) : Starting dose: 250 mg twice daily, Increase dose to 500 mg twice daily after 2 week. Dose can be further increased by 250 mg twice daily every 2 week depending upon the clinical response. Max: 1500 mg twice daily. ii) ADULT more than 18 years and ADOLESCENT (12-17 years) ≥50 kg: Initially 500 mg twice daily may be increased up to 1500 mg twice daily. Dose changes can be made in 500 mg twice daily increments or decrements 2-4 weekly. CHILD (4-11 years) and ADOLESCENT (12-17 years) <50 kg : Initially 10 mg/kg twice daily, may be increased up to 30 mg/kg twice daily. Dose changes should not exceed increments or decrements of 10 mg/kg twice daily every 2 weeks. CHILD ≥50 kg: Adult dose.
Phenobarbitone 30 mg Tablet	APPL SS/DD	B		Epilepsy.	ADULT: 60 - 180 mg daily on. CHILD: Up to 8 mg/kg daily.

Phenobarbitone Sodium 200 mg/ml Injection	LP/SH FPD KT/DD	B		All forms of epilepsy except absence seizures.	ADULT: 10 mg/kg IV at a rate of not faster than 100 mg/minute. Initial maximum dose does not exceeding 1 gm. Daily maintenance of 1 - 4 mg/kg/day. CHILD: 3- 5mg per kg body weight as a single dose by intramuscular injection. Dosing is according to product insert.
Phenytoin Sodium 100 mg Capsule	APPL SS	B		Control of tonic-clonic (grand mal) and psychomotor seizures.	ADULT: Initial: 300mg daily in 3 equally divided doses Maintenance: 300-400 daily in 3-4 equally divided doses Max. dose: 600mg daily CHILD: Initial: 5mg/kg/day in 2-3 equally divided doses Maintenance: 4-8mg/kg/day Max. dose: 300mg daily Dosing is according to product insert.
Phenytoin Sodium 125 mg/5 ml Suspension	LP/SH FPL KT	B		Control of tonic-clonic (grand mal) and psychomotor seizures.	ADULT: Initial: 125mg 2-3 times daily. Max. dose: 625mg daily CHILD: Initial: 5mg/kg/day in 2-3 divided doses Maintenance: 4-8 mg/kg/day in equally divided doses Max. dose: 300mg daily Dosing is according to product insert.
Phenytoin Sodium 50 mg/ml Injection	APPL SS	B		i) Control of status epilepticus of the tonic-clonic (grand mal) type ii) Prevention and treatment of seizures occurring during or following neurosurgery.	i) ADULT Loading: 10-15mg/kg slow IV (max. 50mg per minute) Maintenance: 100mg orally or IV every 6-8 hours NEONATE & CHILD Loading: 15-20mg/kg IV slow IV (max. 1-3mg/kg/minute) ii) 100-200mg deep IM at approximately 4 hour intervals during surgery and continued postoperative. Dosing is individualised and according to product insert/ protocol.
Valproic Acid and Sodium Valproate (ER) 500 mg Tablet	LP/SH SS	B	**Epilim Chrono**	i) In the treatment of generalized or partial epilepsy, particularly with the following patterns of seizures:absence, myoclonic, tonic-clonic, atonic-mixed as well as, for partial epilepsy: simple or complex seizures, secondary generalized seizures, specific syndrome (West, Lennox-Gastatut) ii) Treatment and prevention of mania associated with bipolar disorders.	i) ADULT: Dosage should start at 500 mg daily increasing by 200 mg at three-day intervals until control is achieved. This is generally within the dosage range 1000 mg to 2000 mg per day. CHILD: >20KG: 500 mg/day (irrespective of weight) with spaced increases until control is achieved ii) Initial dose of 1000 mg/day, to be increase rapidly as possible to achieve lowest therapeutic dose, which produce desired clinical effects. Recommend initial dose is 1000 mg & 2000 mg daily. Max dose 3000 mg daily.
Vigabatrin 500mg Table	LP/SH FPL KT *Paediatric (Named-Patient Basis)	UKK		Antiepileptic drug for infantile spasm (West Syndrome)	Dosing is individualised and according to product insert/protocol
Sodium Valproate 200 mg Tablet	APPL SS	B		i) Epilepsy ii) Treatment and prevention of mania associated with bipolar disorders.	i) Epilepsy: ADULT: Initially 600 mg/day in 2 - 3 divided doses, dose may be increased by 200 mg at 3-day intervals to max 2.5 g/day. Usual maintenance dose: 1-2 g/day (20-30 mg/kg/day). CHILD: More than 20 kg. Initially 400 mg/day with spaced increases until control is achieved (usually 20-30 mg/kg/day), dose may be increased to 35 mg/kg/day. Less than 20 kg 20 mg/kg/day, in severe cases the dose may be increased provided plasma concentration can be monitored. ii) Treatment and prevention of mania associated with bipolar disorders: ADULT: The recommended initial dose is 1000 mg/day. The dose should be increased as rapidly as possible to achieve the lowest therapeutic dose, which produces the desired clinical effects. The recommended maintenance dosage for the treatment of bipolar disorder is between 1000 mg and 2000 mg daily. In exceptional cases, the dose may be increased to not more than 3000 mg daily.

Sodium Valproate 200 mg/5 ml Syrup	LP/KKM SS	B		i) Treatment of generalized or partial epilepsy. ii) Treatment and prevention of mania associated with bipolar disorder	i. Epilepsy: ADULT: Initially 600 mg/day in 2 - 3 divided doses, dose may be increased by 200 mg at 3-day intervals to max 2.5 g/day. Usual maintenance dose: 1-2 g/day (20-30 mg/kg/day). CHILD: - More than 20 kg. Initially 400 mg/day with spaced increases until control is achieved (usually 20-30 mg/kg/day), dose may be increased to 35 mg/kg/day. - Less than 20 kg 20 mg/kg/day, in severe cases the dose may be increased provided plasma concentration can be monitored. ii. Treatment and prevention of mania associated with bipolar disorders: ADULT: The recommended initial dose is 1000mg/day. The dose should be increased as rapidly as possible to achieve the lowest therapeutic dose, which produces the desired clinical effects. The recommended maintenance dosage for the treatment of bipolar disorder is between 1000mg and 2000mg daily. In exceptional cases, the dose may be increased to not more than 3000mg daily.
Sodium Valproate 400 mg Injection	LP/SH FPD KT	B		Status epilepticus.	ADULT and CHILD above 10 years: 10 to 15 mg/kg/day IV, may increase 5 to 10 mg/kg/week to achieve optimal clinical response (Maximum 60 mg/kg/day or less with a therapeutic range of 50 to 100 mcg/mL).
Topiramate 50 mg Tablet	LP/KKM FPL KT *Paediatric (Named-Patient Basis) *Medical	A*		As adjunctive therapy for adults and children (2 years and above) with: i) partial onset seizures and generalized tonic-clonic seizures ii) seizures associated with Lennox Gastaut syndrome.	ADULT: Usual daily dose: 200-400 mg/day. CHILD: Daily doses up to 30mg/kg/day Dosing is according to product insert.
	LP/KKM FPL KT *Psychiatric (Named-Patient Basis)-UKK	UKK		***Off label indication:*** Bipolar mood disorder (UKK)	50mg ON
Topiramate 100 mg Tablet	LP/KKM FPL KT *Medical	A*		As adjunctive therapy for adults and children (2 years and above) with: i) partial onset seizures and generalized tonic-clonic seizures ii) seizures associated with Lennox Gastaut syndrome.	ADULT: Usual daily dose: 200-400 mg/day. CHILD: Daily doses up to 30mg/kg/day Dosing is according to product insert.

7.3 MEDICINES USED IN PARKINSONISM AND RELATED DISORDERS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Benzhexol 2 mg Tablet	APPL SS	B		i) Symptomatic treatment of paralysis agitans and of parkinsonism, arteriosclerotic, idiopathic, or post-encephalitic origin ii) Alleviate extrapyramidal syndrome induced by phenothiazine derivatives or reserpine iii) Spasmodic torticollis, facial spasms and other dyskinesia.	i) & iii) Initial: 1-2mg daily Maintenance: Gradual increment to 6-10mg daily according to response ii) 5-15mg daily Dosing is individualised and according to product insert/ protocol.
Levodopa 100 mg and Carbidopa 25 mg Tablet	APPL SS	B		Parkinson's disease.	Patients not receiving Levodopa before, initially 100 - 125 mg 3 - 4 times daily adjusted according to response. Maintenance: 0.75 - 2 g in divided doses. In patients previously treated with Levodopa the dose should be about 20 - 25% of the dose previously being taken.

Levodopa 100 mg, Benserazide 25 mg HBS Capsule	LP/SH FPL KT	B	Madopar HBS	Parkinson's disease.	Initial: 100/25 mg 1-2 times/day, increase every 3-4 days until therapeutic effect, optimal dosage: 400/100 mg to 800/200 mg/day divided into 4-6 doses. Dose: 200/50 mg used only when maintenance therapy is reached and not to exceed levodopa 1000-1200 mg/benserazide 250-300 mg per day.
Levodopa 200 mg, Benserazide 50 mg Tablet	APPL SS	B	Madopar	Parkinson's disease.	Initial: 100/25 mg 1-2 times/day, increase every 3-4 days until therapeutic effect, optimal dosage: 400/100 mg to 800/200 mg/day divided into 4-6 doses. Dose: 200/50 mg used only when maintenance therapy is reached and not to exceed levodopa 1000-1200 mg/benserazide 250-300 mg per day.
Procyclidine HCl 5 mg/ml Injection	LP/SH FPD KT *Psychiatric *Paediatric *A&E	B		i) All forms of Parkinson's disease (idiopathic paralysis agitants), post-encephalitis and arteriosclerosis ii) To control troublesome extrapyramidal symptoms induced by neuroleptic drugs including pseudo-parkinsonism, acute dystonic reactions and akathisia.	i) Initial dose 2.5mg TDS, increasing by 2.5-5 mg/day at intervals of 2 or 3 days until the optimum clinical response is achieved. Usual maintenance dose: 15-30 mg/day. Max: 60 mg/day ii) Initial dose 2.5 mg TDS, increasing by 2.5 mg daily until symptoms are relieved. Usual maintenance dose: 10-30 mg/day. IV Emergency: 5-10 mg. IM Emergency: 5-10 mg as a single dose, may repeat after 20 mins if needed. Max: 20 mg/day.
Selegiline HCl 5 mg Tablet	APPL SS	A*		Only for treatment of late stage Parkinsonism with on and off phenomenon.	5 mg twice daily at breakfast and lunch. Maximum 10 mg/day.

7.4 MEDICINES USED IN SUBSTANCE DEPENDENCE

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Methadone 5 mg/ml Syrup	KK Mengkibol *Inpatient only	A/KK		Detoxification treatment or maintenance of narcotic addiction.	Initial 10-20 mg per day, increasing by 10-20 mg per day until there are no signs of withdrawal or intoxication. Usual dose 40-60 mg/day.

7.5 MEDICINES FOR DEMENTIA

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Donepezil HCl 5 mg Tablet	LP/KKM SS	A/KK		Treatment of mild, moderate and severe dementia in Alzheimer's disease. Prescribing Restrictions: Psychiatrists, Neurologists, Geriatricians, Family Medicine Specialists trained in Mental Health Disorders	5 - 10 mg once daily at bedtime. Maximum 10 mg daily
Memantine HCl 10 mg Tablet	LP/KKM SS *Medical	A*		Treatment of moderate to severe Alzheimer's disease.	Intial Week 1: 5 mg daily Week 2: 10mg daily Week 3: 15 mg daily Week 4 and subsequent: 20mg daily Maintenance: 20 mg daily Max. dose: 20 mg daily.
Rivastigmine 1.5 mg Capsule	LP/KKM FPL KT	A*		For psychiatrists and neurologists only. Mild to moderately severe dementia associated with Alzheimer's or Parkinson's disease.	Initial dose 1.5 mg 2 times daily, may increase by 1.5 mg 2 times daily every 2 weeks to maximum of 6 mg 2 times daily. If treatment is interrupted for several days, should be reinitiated at the lowest daily dose.
Rivastigmine 3 mg Capsule	LP/KKM FPL KT	A*		For psychiatrists and neurologists only. Mild to moderately severe dementia associated with Alzheimer's or Parkinson's disease.	Initial dose 1.5 mg 2 times daily, may increase by 1.5 mg 2 times daily every 2 weeks to maximum of 6 mg 2 times daily. If treatment is interrupted for several days, should be reinitiated at the lowest daily dose.
Rivastigmine Patch 4.6mg/24hr	LP/SH FPL KT	A*		i) Mild to moderately severe dementia of the Alzheimer's type ii) Severe dementia of the Alzheimer's type iii) Mild to moderately severe dementia associated with Parkinson's disease *Prescribing Restrictions:* Use as second line/alternative option if the first line medication with oral tablet failed or patients are not able to tolerate the oral medication	Initial: 4.6mg/24hr once daily Maintenance: 9.5mg/24hr once daily after a minimum of 4 weeks and then 13.3mg/24hr if tolerated Dosing is individualised and according to product insert.

Rivastigmine 9.5 mg/24 hr Transdermal Patch	LP/SH FPL KT	A*		i) Mild to moderately severe dementia of the Alzheimer's type ii) Severe dementia of the Alzheimer's type iii) Mild to moderately severe dementia associated with Parkinson's disease Use as second line/ alternative option if the first line medication with oral tablet failed or patients are not able to tolerate the oral medication.	Initial: 4.6mg/24hr once daily Maintenance: 9.5mg/24hr once daily after a minimum of 4 weeks and then 13.3mg/24hr if tolerated Dosing is individualised and according to product insert.

7.6 CENTRAL NERVOUS SYSTEM STIMULANTS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Atomoxetine HCl 10 mg Capsule	LP/SH FPL KT	A*		Attention deficit hyperactivity disorder (ADHD) in children 6 years and older who do not respond to methylphenidate or who have intolerable effects or have tics. Diagnosis should be made according to DSM IV criteria or the guidelines in ICD-10.	CHILD and ADOLESCENTS up to 70 kg : Initially 0.5 mg/kg/day for at least 7 days, then increased according to response . Maintenance: 1.2 mg/kg/day. ADULTS and ADOLESCENTS more than 70 kg: Initially 40 mg/day for at least 7 days then increased according to response. Maintenance: 80 mg/day. Max 100 mg/ day.

7.7 MEDICINES USED IN NAUSEA AND VERTIGO

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Betahistine Dihydrochloride 24 mg Tablet	LP/KKM SS	A/KK		i) Meniere's Syndrome as defined by the following core symptoms: - Vertigo (with nausea/vomiting) - Hearing loss (Hardness of hearing) - Tinnitus (ringing in the ears) ii) Symptomatic treatment of vestibular vertigo. *Prescribing Restrictions* Diagnosis of Meniere's Syndrome or Vestibular Vertigo has to be confirmed by Otorhinolaryngologist.	24-48 mg in divided dose daily.

7.8 MISCELLANEOUS NEUROLOGY

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Baclofen 10 mg Tablet	APPL SS	B		Spasticity of the skeletal muscle.	ADULT:5 mg 3 times daily. Max: 80 mg daily (20mg 4 times a day). CHILD: starting dose: 0.3mg/kg/day in divided dose, titrate up cautiously in 1 -2 weeks interval. Usual maintenance dose: 0.75 - 2 mg/kg daily (age more than 10 years, maximum: 2.5 mg/kg daily). The dose should not exceed 40 mg/day in children below 8 years of age, but a maximum dose of 60 mg/day may be given in children over 8 years of age. Dosing is individualised and according to product insert/protocol
Dantrolene Sodium 20 mg Injection	APPL FPD KT *Anaes	UKK		Management of fulminat hypermetabolism of skeletaal muscle characteristic of malignant hyperthermia crisis.	Adult and paediatric: Continuous rapid IV push beginning at a minimum dose of 1 mg/kg, then continue untuil symptoms subside or maximum cumulative dose of 10 mg/kg is achieved. Preoperative: Prophylactic dose of 2.5 mg/kg, starts approximately 1 1/4 hours before anticipated anaesthesia and infused for 1 hour.
Diazepam 5 mg Tablet	LP/SH FPD KT/DD	B		i) Muscle spasm of varied aetiology, including tetanus ii) Anxiety disorders.	i) ADULT : 2-10 mg 3-4 times daily. CHILD 6 months and older: 0.12 - 0.8 mg/kg daily in divided doses, every 6-8 hours ii) ADULT : 2 mg 3 times daily, increased in severe anxiety to 15 - 30 mg daily in divided doses. ELDERLY (or delibitated) half adult dose. CHILD (night terrors), 1 - 5 mg at bedtime.
Mecobalamin 500 mcg Tablet	APPL SS	B		Peripheral neuropathies.	1 tablet 3 times daily. The dosage should be adjusted according to age of patient and severity of symptoms.
Neostigmine Methylsulphate 2.5 mg/ml Injection	APPL SS	B		i) Symptomatic treatment of myasthenia gravis where oral therapy is impractical ii) Reversal of the effects of non-depolarizing neuromuscular blockade iii)The management of post-operative distension, paralytic ileus and urinary retention, where mechanical obstruction has been out-ruled	i) ADULT: 1 - 2.5 mg at suitable intervals by SC, IM or IV. Usual total daily dose 5 - 20 mg. CHILD: 0.1mg IM. Titrated in the range of 0.05mg - 0.25mg. NEONATE: 50 - 250 mcg every 4 hours ii) By IV injection over 1 minute, 50 - 70 mcg/kg (maximum 5 mg and 2.5mg for children) after or with atropine sulphate 0.6 - 1.2 mg iii) Adults: SC or IM 0.5 - 2.5mg. Children: SC or IM 0.125mg - 1mg

Pregabalin 75 mg Capsule	LP/KKM SS *Ortho *Anaes	A*, A/KK		Category prescriber A*: i. Fibromyalgia ii. Epilepsy Category prescriber A/KK: iii. Neuropathic pain Consultant/specialists for specific indications only, including Geriatricians Indication iii: In primary care setting, for patients who cannot tolerate gabapentin at high doses.	The dose range is 150 to 600 mg per day given in either two or three divided doses. Dosing is according to Product Insert
Pyridostigmine Bromide 60 mg Tablet	APPL SS	B		Myasthenia gravis.	ADULT: 30 - 120 mg at suitable intervals throughout the day, total daily dose 0.3 - 1.2 g. CHILD up to 6 years initially 30 mg, 6 - 12 years initially 60 mg, usual total daily dose 30 - 360 mg.

8 ANTI-INFECTIVES

8.1 ANTIBACTERIAL MEDICINES

8.1.1 AMINOGLYCOSIDES

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Amikacin 125 mg/ml Injection	APPL SS	A		Infections due to susceptible organisms.	ADULT : (IM or IV) : 15 mg/kg/day 8 -12 hourly for 7 - 10 days. Maximum : 1.5 g/day. CHILD : 15 mg/kg/day 8-12 hourly. Max : 1.5 g/day. NEONATES : Initial loading dose of 10 mg/kg followed by 7.5 mg/kg/day 12 hourly. Maximum 15 mg/kg/day.
Amikacin 250 mg/ml Injection	APPL FPL KT *Medical (Named-Patient Basis)	A		Infections due to susceptible organisms.	ADULT : (IM or IV) : 15 mg/kg/day 8 -12 hourly for 7 - 10 days. Maximum : 1.5 g/day. CHILD : 15 mg/kg/day 8-12 hourly. Max : 1.5 g/day. NEONATES : Initial loading dose of 10 mg/kg followed by 7.5 mg/kg/day 12 hourly. Maximum 15 mg/kg/day.
Gentamicin Sulphate 40 mg/ml Injection	APPL SS	B		Infections due to susceptible organisms.	ADULT : 3 - 5 mg/kg/day 8 hourly IM or IV. CHILD up to 2 weeks: 3 mg/kg every 12 hours; 2 weeks - 12 years: 2 mg/kg 8 hourly.
Vancomycin HCl 500 mg Injection	APPL SS	A*		i. Treatment of infections due to susceptible gram-positive organisms which cannot be treated with other agents (eg. MRSA and Enterococcus sp.) ii. Treatment of severe staphylococcal infections in patients who cannot receive or who have failed to respond to the penicillins and cephalosporins.	Slow IV infusion, ADULT: 500 mg over at least 60 minutes every 6 hours or 1 g over at least 100 minutes every 12 hours. NEONATE up to 1 week, 15 mg/kg initially, then 10 mg/kg every 12 hours. INFANT 1 - 4 weeks, 15 mg/kg initially then 10 mg/kg every 8 hours. CHILD over 1 month, 10 mg/kg every 6 hours.

8.1.2 CEPHALOSPORINES

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Cefazolin Sodium 1 g Injection	LP/SH FPD KT	A		Infection caused by cefazolin-sensitive microorganism, infection of the respiratory tract, urogenital tract, skin and soft tissue, bile duct, bones and joint, endocarditis, systemic septic infection, peri-operative/ surgical prophylaxis.	ADULT: Uncomplicated infections: 500 - 1000 mg 2 - 3 times daily. Moderately severe and severe infections: 500 - 1000 mg 3 - 4 times daily. Severe life-threatening infections: 1 - 1.5 g 4 times daily. Rarely, dose up to 12 g daily. CHILDREN >1 month: 25-50 mg/kg/day in 3-4 divided dose.
Cefepime 1 g Injection	LP/KKM FPD KT	A*		Febrile neutropenia, septicaemia, lower respiratory tract infection, urinary tract infection, skin and skin structure infections, gynaecologic and intra-abdominal infections.	ADULT: 1 - 2 g twice daily for most infections. For severe infections including febrile neutropenia: 2 g 3 times daily. CHILD: 2 mth - 16 yr: ≤40 kg: 50 mg/kg every 8-12 hr for 7-10 days.
Cefoperazone Sodium 500 mg & Sulbactam Sodium 500 mg Injection	LP/SH FPD KT	A	**Sulperazon**	i) Treatment of infections due to multi-drug resistance pathogens producing B-lactamase ii) Treatment of infections caused by Acinetobacter species.	ADULT: 1 - 2 g twice daily. In severe or refractory infections the daily dosage of sulbactam/cefoperazone may be increased up to 8 g (4 g cefopreazone activity) CHILD: 40 - 80 mg/kg/day in 2 to 4 equally divided doses; in serious or refractory infections, may increase to 160 mg/kg/d in 2 - 4 equally divided doses.
Cefoperazone Sodium 1 g Injection	APPL SS	A		Infections due to gram-negative bacteria.	ADULT : 1 - 2 g twice daily IM or IV. By IV, adult dose may be doubled. Maximum : 16 g daily in divided doses. CHILD & INFANT : 50 - 200 mg/kg/day in 2 - 4 divided dise. NEONATE less than 8 days : 50 -200 mg/kg/day 12 hourly.

Cefotaxime 1 g Injection	APPL FPD KT	A		Infections due to gram-negative bacteria.	ADULT : 1 g 12 hourly (up to 12 g/day in severe cases). CHILD : 50 - 180 mg/kg/day in 4 - 6 divided doses.
Ceftazidime 1 g Injection	APPL SS	A		Severe gram negative bacterial infections.	ADULT : 1 g 8 hourly or 2 g 12 hourly. In severe infections : 2 g 8 hourly. CHILD : 25 - 150 mg/kg/day in 2 - 3 divided doses.
Ceftriaxone 1g Injection	APPL SS	A		Infections caused by susceptible organisms.	ADULT: 1 - 2 g once daily. Severe infection: 4 g daily at 12 hour intervals. INFANT & CHILD, 3 weeks - 12 years: 20 - 80 mg/kg body weight daily. CHILD with body weight 50 kg or more: adult dose. NEONATE up to 2 weeks: 20 - 50 mg/kg body weight daily, not to exceed 50 mg/kg.
Cefuroxime Axetil 125 mg/5 ml Suspension	LP/SH FPL KT	A		Infections caused by susceptible organisms.	30 mg/kg/day in 2 divided doses, up to 500 mg daily.
Cefuroxime Axetil 125 mg Tablet	LP/KKM SS	A/KK		Upper respiratory tract, genito-urinary tract, skin & soft tissue and urinary tract infections (UTI).	ADULT: Most infections: 250 mg twice daily Severe infections: 500mg twice daily CHILD: Most infections: 125mg twice daily or 30 mg/kg/day in 2 divided doses, up to 500 mg daily Severe infections: 250mg twice daily Dosing is individualised and according to package insert
Cefuroxime Sodium 1.5 g Injection	APPL SS	A		Infections caused by susceptible organisms, surgical prophylaxis.	ADULT: 750 mg every 6 - 8 hours as IM or IV. Severe infections: 1.5 g every 6 - 8 hours as IV. CHILD: 30 - 100 mg/kg/day in 3 - 4 divided doses or 2-3 divided doses in neonates. Surgical prophylaxis: 1.5 g IV.
Cefuroxime Sodium 750 mg Injection	APPL SS	A		Infections caused by susceptible organisms, surgical prophylaxis.	ADULT: 750 mg every 6 - 8 hours as IM or IV. Severe infections: 1.5 g every 6 - 8 hours as IV. CHILD: 30 - 100 mg/kg/day in 3 - 4 divided doses or 2-3 divided doses in neonates. Surgical prophylaxis: 1.5 g IV.
Cephalexin Monohydrate 250 mg Capsule	APPL SS	B		i) Respiratory tract infection, urinary tract infection ii) Complicated, recurrent or chronic infections, bronchitis iii) Pneumonia.	i) 250 mg 6 houly ii) 250 - 500 mg 6 hourly iii) 1 - 1.5 g 3 times daily or 4 times daily. Maximum: 6 g/day. Child: 25-100 mg/kg daily in divided doses. Maximum: 4 g daily.

8.1.3 CHLORAMPHENICOLS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Chloramphenicol 5% w/v Ear Drops	APPL SS	C	**CMC**	Acute otitis media, otits externa with perforation.	Apply 2 - 3 drops into the ear 2 - 3 times daily. Not to be used for long term.
Chloramphenicol 0.5% Eye Drops	LP/KKM SS	C	**CMC**	Ophthalmic infections	Instil 1 drop of a 0.5% solution every 2 hr. Increase dosage interval upon improvement.
Chloramphenicol 1% Eye Ointment	APPL SS	C	**CMC**	Treatment of ocular infections involving the conjunctiva and/or cornea caused by chloramphenicol susceptible organisms.	ADULT and CHILD : Apply to the conjunctiva, a thin strip (approximately 1 cm) of ointment every 3 hours or more frequently.

8.1.4 MACROLIDES

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Azithromycin 200 mg/5 ml Granules	LP/SH FPL KT *Paediatric	A* A/KK		**PRESCRIBER CATEGORY A***: Treatment of complicated respiratory tract infections. **PRESCRIBER CATEGORY A/K:** **Treatment of pertussis.**	CHILD 36 - 45 kg: 400 mg, 26 - 35 kg: 300mg, 15 - 25 kg 200 mg, less than 15 kg: 10 mg/kg. To be taken daily for 3 days or to be taken as a single dose on day 1, then half the daily dose on days 2 - 5.

Azithromycin 250 mg Tablet	LP/KKM SS	A*, A/KK		**Category of prescriber A*:** (i) Treatment of complicated respiratory tract infections; (ii) Prophylaxis against Mycobacterium avium complex in patients with advanced HIV **Category of prescriber A/KK:** (iii) Adult treatment of uncomplicated genital infections due to Chlamydia trichomatis or susceptible Neisseria gonorrhoea. (iv) Treatment of pertussis (v) Outpatient treatment of community associated pneumonia (CAP) with comorbidities (vi) Acute bacterial rhinosinusitis in pregnant patients with antibiotic allergy (vii) Yaws (treatment & prophylaxis)	i) 500 mg daily for 3 days; ii) 1 g weekly iii) 1 g as a single dose; iv) 500mg in a single dose on day 1 then 250mg per day on days 2-5
Azithromycin 500 mg Injection	LP/KKM FPD KT	A*		i) Severe atypical pneumonia ii) Treatment of pelvic inflammatory diseases (PID) caused by susceptible organisms in patients who require initial IV therapy.	i) 500 mg IV as a single daily dose for a minimum of two days followed by 500 mg oral dose as single daily dose to complete a 7- 10 days course ii) 500 mg as a single dose by the IV route for 1 or 2 days followed by oral azithromycin at a single daily dose of 250 mg to complete a 7-day course of therapy.
Clarithromycin 250 mg Tablet	LP/SH SS	A*		Only for i) treatment of complicated respiratory tract infection not responding to standard macrolides ii) eradication of Helicobacter pylori infection.	i) 250 - 500 mg twice daily. Up to 6 - 14 days ii) 500 mg twice daily with omeprazole & amoxicillin. Up to 2 weeks.
Clindamycin HCl 300 mg Capsule	LP/SH FPL KT	A*		i) Skin and soft tissue infections, bone & joint infections ii) Cerebral toxoplasmosis iii) Children less than 8 years old: Treatment and prophylaxis of malaria in combination with quinine, as an alternative to doxycycline.	i) ADULT: 150 - 300 mg every 6 hours; up to 450 mg every 6 hours in severe infections; Max: 1.8 g/day CHILD: 3 - 6 mg/kg every 6 hours. Children weighing <10 kg should receive at least 37.5 mg every 8 hours ii) 600 mg 6 hourly for 6 weeks iii) 10 mg/kg twice a day, in combination with quinine. The combination to be given for 7 days.
Clindamycin Phosphate 150 mg/ml Injection	LP/SH FPD KT	A*		i) Skin and soft tissue infections, bone & joint infections ii) Cerebral toxoplasmosis.	i) ADULT : 0.6 - 2.7 g daily (in 2 - 4 divided doses); up to 4.8 g daily; CHILD over 1 month, 20 - 40 mg/kg/day or 350 mg/m2/day in 3 - 4 divided doses ii) 1200 mg every 6 hours for 3 weeks followed by 300 mg orally every 6 hours for another 3 weeks.
Erythromycin Ethylsuccinate 200 mg/5 ml Suspension	APPL FP KT	B	**EES**	Treatment of susceptible bacterial infections.	CHILD: 30-50 mg/kg daily, increased to twice the usual dose in severe cases. 2-8 year: 1 g daily in divided doses; <2 yr: 500 mg daily in divided doses.
Erythromycin Ethylsuccinate 400 mg Tablet	LP/KKM FPL KT	B	**EES**	Treatment of susceptible bacterial infections.	ADULT 400 mg 6 hourly or 800 mg 12 hourly. Max: 4 g/day. CHILD 30-50 mg/kg in divided doses. CHILD 2-8 year 1 g/day in divided doses in severe cases. INFANT & CHILD ≤2 yr 500 mg/day in divided doses.
Erythromycin Lactobionate 500 mg Injection	LP/SH FPD KT	A*		Only for treatment of i) certain forms of meningitis ii) septicaemia not responding to usual antibiotics iii) mycoplasma pneumonia iv) infection with gram-positive organisms (e.g. tetanus, streptococcal infection) associated with Penicillin allergy, only when oral erythromycin cannot be given.	ADULT & CHILD : 25-50 mg/kg/day infusion every 6 hours. Maximum 4 g/day.

8.1.5 PENICILLINS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Amoxicillin Trihydrate 125 mg/5 ml Syrup	LP/SH SS	B		Infections caused by susceptible strains of gram positive and gram negative organisms.	CHILD less than 10 years: 125 - 250 mg 8 hourly. CHILD less than 20 kg: 20 - 40 mg/kg/day in 3 - 4 divided doses.
Amoxicillin 1 g & Clavulanate 200 mg Injection	LP/KKM SS	A	**Augmentin**	Infections caused by susceptible organisms. Respiratory tract, skin, soft tissue, GUT infection, septicaemia, peritonitis, post-op infection & osteomyelitis.	CHILD less than 3 months: 30 mg/kg 12 hourly. 3 months - 12 years: 30 mg/kg 6 - 8 hourly. ADULT : 1.2 g by IV or intermittent infusion 6 - 8 hourly.

Amoxicillin 500 mg Capsule	LP/SH SS	B		Infections caused by susceptible strains of gram positive and gram negative organisms.	ADULT: 250 - 500 mg 3 times daily. CHILD: 20 - 40 mg/kg/day in divided doses 8 hourly.
Amoxicillin 500 mg & Clavulanate 125 mg Tablet	APPL SS	A/KK	**Augmentin**	Infections due to beta-lactamase producing strain where amoxicillin alone is not appropriate. Respiratory tract, skin, soft tissue, GUT infection, septicaemia, peritonitis, post-op infection & osteomyelitis.	ADULT & CHILD more than 12 years: Mild to moderate infections: 625 mg twice daily.
Amoxicillin & Clavulanate 228 mg/5 ml Syrup	APPL SS	A/KK	**Augmentin**	Infections caused by susceptible organisms.	Mild to Moderate infection: 25 mg/kg/day (based on Amoxicillin dose) in 2 divided dose. Severe infection: 45 mg/kg/day (based on Amoxicillin dose) in 2 divided dose.
Ampicillin Sodium 1 g & Sulbactam Sodium 500 mg Injection	LP/KKM SS	A	**Unasyn**	Treatment of susceptible bacterial infections.	ADULT: 1.5 - 12 g/day in divided doses 6 - 8 hourly. Maximum: 4 g Sulbactam. CHILD: 150-300 mg/kg/day 6 - 8 hourly. Prophylaxis of surgical infections: 1.5 - 3 g at induction of anaesthesia. May be repeated 6 - 8 hourly. NEONATES: First week of life, 75 mg/kg/day in divided doses every 12 hour.
Ampicillin Sodium & Sulbactam 375 mg Tablet	LP/KKM SS	A/KK	**Unasyn**	Treatment of susceptible bacterial infections.	ADULT: 375-750 mg twice daily CHILDREN AND INFANTS: 25-50 mg/kg/day in 2 divided doses, if ≥ 30 kg use an adult dose.
Ampicillin Sodium 500 mg Injection	APPL SS	B		Treatment of susceptible bacterial infections (non beta-lactamase-producing organisms); meningitis.	250 - 500 mg IM/IV every 4 - 6 hours. Maximum: 400 mg/kg/day. Meningitis: 2 g 6 hourly. CHILD: 150 mg/kg/daily IV in divided doses. Usual children dose less than 10 years, half adult dose.
Benzathine Penicillin 2.4 MIU (1.8 g) Injection	APPL FPD KT	B		i) Treatment of mild to moderately severe infections due to Penicillin G-sensitive organisms ii) Treatment of syphillis.	i) ADULT : 1.2 mega units IM ii) For syphillis : 2.4 mega units weekly for 1-3 weeks.
Benzylpenicillin 1 mega unit (600 mg) Injection	APPL SS	B	**C. Pen.**	i) Infections caused by susceptible organisms ii) Infective endocarditis.	i) ADULT: 600 mg - 3600 mg (1 - 6 mega units) daily, divided into 4 to 6 doses. Higher doses (24 mega units) in divided doses may be given in serious infections such as meningitis. CHILD 1 month to 12 years old: 100 mg/kg/day in 4 divided doses, not exceeding 4 g/day; Infants 1 - 4 weeks: 75 mg/kg/day in 3 divided doses; Newborn Infants: 50 mg/kg/day in 2 divided doses ii) 7.2 to 12 g (12 - 20 mega units) maybe given daily in divided doses.
Benzylpenicillin 5 mega units (3 g) Injection	APPL SS	B	**C. Pen.**	i) Infections caused by susceptible organisms ii) Infective endocarditis.	i) ADULT: 600 - 1200 mg IM 4 times daily, increased if necessary in more serious infections. CHILD: 50 - 100 mg/kg body weight daily IV in 2 - 4 divided doses ii) ADULT: 7.2 g daily by slow IV infusion in 6 divided doses.
Cloxacillin Sodium 125 mg/5 ml Suspension	APPL SS	B		Treatment of susceptible bacterial infections, notably penicillinase-producing staphylococci.	CHILD: 50-100 mg/kg in divided doses every 6 hours.
Cloxacillin Sodium 500 mg Capsule	LP/SH SS	B		Treatment of susceptible bacterial infections, notably penicillinase-producing staphylococci.	ADULT: 250 - 500 mg every 6 hours. CHILD: 50-100 mg/kg in divided doses every 6 hours.
Cloxacillin Sodium 500 mg Injection	APPL SS	B		Treatment of susceptible bacterial infections, notably penicillinase-producing staphylococci infections.	ADULT: 250 to 500 mg every 6 hours depending on type and severity of infection. CHILD less than 20 kg: 25 to 50 mg/kg/day in equally divided doses every 6 hours.

Phenoxymethyl Penicillin 125 mg/5 ml Syrup	LP/SH SS	C		Treatment or prophylaxis of infections caused by susceptible organisms.	CHILD: Up to 1 year: 62.5 mg 6 hourly; 1 - 5 years : 125 mg 6 hourly; 6 - 12 years : 250 mg 6 hourly.
Phenoxymethyl Penicillin 125 mg Tablet	APPL SS	C		i) Treatment or prophylaxis of infections caused by susceptible organisms ii) Prophylactic, rheumatic fever.	i) ADULT: 500 - 750 mg 6 hourly. CHILD; up to 1 year: 62.5 mg, 1 - 5 years: 125 mg, 6 - 12 years: 250 mg 6 hourly ii) ADULT: 125 - 250 mg twice daily. CHILD: 25 - 50 mg/kg in divided doses every 6 - 8 hours. Maximum: 3 g/day.
Piperacillin 4 g & Tazobactam 500 mg Injection	LP/KKM SS	A*	**Tazocin**	Febrile neutropenia, lower respiratory infection and severe sepsis.	ADULT and CHILD more than 12 years: 4.5 g 6 hourly, for neutropenia ADULT and CHILD more than 50 kg: 4.5 g 6 hourly. CHILD less than 50 kg: 90 mg/kg 6 hourly.

8.1.6 TETRACYCLINES

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Doxycycline 100 mg Capsule	APPL SS	B		Prophylaxis and treatment for infections due to susceptible organisms.	Prophylaxis 100-200mg daily or weekly Treatment 100-300mg daily Dosing is individualised based on type of infections and according to product insert/protocol
Minocycline 100 mg Capsule	LP/SH FPD KT *Medical (Dr. Hidayah)	A*		i. As second-line treatment for leprosy only ii. Treatment of infections due to susceptible strains of the designated organism e.g. Carbapenem-resistant acinetobacter baumannii	i. 100 mg daily 6 - 18 months ii. Initially, 200 mg followed by 100-200mg every 12 hours

8.1.7 QUINOLONES

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Ciprofloxacin 200 mg/100 ml Injection	LP/KKM FPD KT	A		Treatment of infections due to susceptible bacterial strains.	ADULT: the dosage range is 100-400 mg twice daily Gonorrhoea: 100 mg single dose Upper and Lower Urinary Tract Infection: 100 mg bd Upper and Lower Respiratory Tract Infection: 200 mg bd - 400 mg twice daily Cystic Fibrosis with psuedomonal Lower RTI: 400 mg bd Others: 200-400 mg bd inhalation Anthrax: 400 mg bd.
Ciprofloxacin 250 mg Tablet	LP/SH SS	A		Treatment of infections due to susceptible bacterial strains.	ADULT: 125 - 750 mg twice daily. Acute gonorrhoea: a single dose of 250 mg.
Ofloxacin 100 mg Tablet	LP/SH FPL KT *Medical	A		i) As second-line treatment of leprosy ii) As second-line treatment for tuberculosis and multidrug resistant tuberculosis (MDR-TB) iii) Sequential therapy for UTI and pyelonephritis.	i) 400 mg/day ii) 400 mg twice daily iii) 200 mg twice daily.
Levofloxacin 500mg Tablet	LP/SH FPL KT *Medical	A*		Community acquired pneumonia	500 mg daily for 7 - 14 days
Levofloxacin 500mg Injection	LP/KKM FPD KT *Medical (Dr. Hidayah)	A*		Community acquired pneumonia	500 mg daily for 7 - 14 days

8.1.8 OTHER ANTIBIOTICS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE

Clofazimine 100mg Capsule	LP/SH FPL KT (Named-Patient Basis)	UKK		Off-label use: Nontuberculous Mycobacteria Pulmonary Disease (NTM-PD) caused by Mycobacterium abscessus	100mg OD
Colistimethate Sodium 1 million IU per vial (Polymyxin E)	LP/KKM FPD KT *HODs	A*		Intravenous administration for the treatment of serious infections caused by Gram negative bacteria, when more commonly used systemic antibacterial agents may be contraindicated or may be ineffective because of bacterial resistance.	A minimum of 5 days treatment is generally recommended. For the treatment of respiratory exacerbations in cystic fibrosis patients, treatment should be continued up to 12 days. Children and adults (including elderly): Up to 60kg: 50,000 units/kg/day to a maximum of 75,000 units/kg/day. The total daily dose should be divided into three doses given at approximately 8-hour intervals. Over 60kg: 1-2 million units three times a day. The maximum dose is 6 million units in 24 hours. Renal impairment: In moderate to severe renal impairment, excretion of colistimethate sodium is delayed. Dosage in Renal Impairment (for over 60 kg body weight): - Mild (CrCl 20-50 ml/min): 1-2 million units every 8 hr. - Moderate (CrCl 10-20 ml/min): 1 million units every 12-18 hr. - Severe (CrCl <10 ml/min): 1 million units every 18-24 hr.
Linezolid 600mg Tablet	APPL FPD KT *Medical (Dr. Hidayah)	A*		MRSA patient with severe sepsis requiring intensive care and not clinically responding to vancomycin.	ADULT: Above 12 years 600 mg every 12 hours for 10-14 days. CHILD :10 mg/kg 3 times daily. PREMATURE NEONATES less than 7 days: 10 mg/kg twice daily
Linezolid 2 mg/ml Injection	LP/KKM FPD KT	A*		MRSA patient with severe sepsis requiring intensive care and not clinically responding to vancomycin.	ADULT: 600 mg twice daily for 10 - 14 days. CHILD: 10 mg/kg 3 times daily. PREMATURE NEONATES less than 7 days: 10 mg/kg twice daily.
Nitrofurantoin 100 mg Tablet	LP/SH FPL KT	B		Uncomplicated lower urinary tract infections.	Acute uncomplicated urinary tract infections ADULT: 50-100 mg 4 times daily for 7 days. Dual-release preparation: 100 mg bid. CHILD: >3 mth and older children: 3 mg/kg daily in 4 divided doses. Prophylaxis of uncomplicated urinary tract infections ADULT: 50- 100 mg at bedtime. CHILD: >3 mth and older children: 1 mg/kg once daily.
Fusidate, Sodium 250 mg Tablet	LP/KKM FPL KT	A*		Treatment of infections caused by susceptible organisms especially Staphylococcal infections including Methicillin Resistant Staphylococcus aureus (MRSA).	ADULT: 500 mg 3 times daily, skin and soft tissue infection: 250 - 500 mg twice daily.
Polymyxin B Sulphate 500,000 units Injection	LP/SH FPD KT *Medical (Dr. Hidayah) *Medical (Anaes)	A*		i. Acute infections caused by susceptible strains of Pseudomonas Aeruginosa. • Treatment of infections of the meninges and blood stream, caused by susceptible strains of Pseudomonas Aeruginosa. ii. Indicated in serious infections caused by susceptible strains of the following organisms, when less potentially toxic drugs are ineffective or contraindicated: • H. influenzae, specifically meningeal infections. • Aerobacter aerogenes, specifically bacteremia. • Klebsiella pneumoniae, specifically bacteremia. (Use as targeted therapy. As 2nd line for empirical therapy. To be prescribed by Infectious Disease, General Medicine & ICU specialist only)	Loading dose: 25,000 units/kg/dose. (Maximum dose: 2,000,000 units / 2MU). Maintenance dose: 15,000 units/kg every 12 hours. (Maximum dose per day: 2,000,000 units / 2MU).

8.1.9 OTHER BETA-LACTAMS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE

Imipenem 500 mg & Cilastatin 500 mg Injection	APPL SS	A*	**Tienam (Imipenem 500)**	Severe infections caused by susceptible pathogens especially useful in infections involving ESBL organisms. Not to be used for prophylaxis.	Based on type or severity of infection, susceptibility of pathogen(s) and patient condition including body weight and renal function. ADULT: 1 - 2 g/day in 3 - 4 divided doses. Maximum: 4 g/day or 50 mg/kg/day. Infusion rate: less than 500 mg dose: over 20 - 30 minutes, more than 500 mg: dose over 40 - 60 minutes. CHILDREN: ≥ 40 kg body weight should receive adult doses. CHILDREN AND INFANTS: <40 kg body weight should receive 15 mg/kg at six hour intervals. The total daily dose should not exceed 2 g.
Meropenem 1 g Injection	LP/KKM SS	A*		i) Nosocomial pneumonia ii) Bacterial Meningitis iii) Empirical treatment for presume infections in patients (adult and children) with febrile neutropenia, used as monotherapy or in combination with anti-virals or antifungal agent iv) Septicaemia v) Urinary tract infections vi) Intra-abdominal infections vii) Gynaecological infections.	ADULT: 1-2 g every 8 hours (refer to specific indication dosing) CHILD (aged 3 months and over): 10-4 0mg/kg 8 hourly, if body weight over 50 kg, adult dosage should be used. Dosing is according to product insert/ protocol.
Meropenem 500 mg Injection	LP/KKM SS	A*		i) Nosocomial pneumonia ii) Bacterial Meningitis iii) Empirical treatment for presume infections in patients (adult and children) with febrile neutropenia, used as monotherapy or in combination with anti-virals or antifungal agent iv) Septicaemia v) Urinary tract infections vi) Intra-abdominal infections vii) Gynaecological infections.	ADULT: 1-2 g every 8 hours (refer to specific indication dosing) CHILD (aged 3 months and over): 10-4 0mg/kg 8 hourly, if body weight over 50 kg, adult dosage should be used. Dosing is according to product insert/ protocol.

8.1.10 SULPHONAMIDES

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Sulphamethoxazole 400 mg & Trimethoprim 80 mg Tablet	APPL SS	B	**Bactrim, Co-Trimoxazole**	i) Severe or complicated infections due to susceptible infection ii) Treatment and prophylaxis of pneumocystis carinii pneumonia (PCP) in immunocompromised patients.	i) ADULT: 1 - 3 tablets twice daily ii)Treatment: ADULT & CHILD over 4 weeks: 120 mg/kg/day in 2 - 4 divided doses for 14 days. Prophylaxis: ADULT: 960 mg once daily or 960 mg on alternate for 14 days (3 times a week) or 960 mg twice daily on alternate days (3 times a week). CHILD; 6 weeks- 5 months: 120 mg twice daily on 3 consecutive days or 7 days per week; 6 months - 5 years: 240 mg; 6-12 years:480 mg.
Sulphamethoxazole 200 mg & Trimethoprim 40 mg/5 ml Suspension	LP/SH FPL KT	B	**Bactrim, Co-Trimoxazole**	Infections caused by susceptible pathogens.	Mild to moderate infections: more than 2 months: 8 - 12 mg Trimethoprim/kg/day divided every 12 hours. Serious Infections: 15- 20 mg Trimethoprim/kg/day divided every 6 hours.
Sulphamethoxazole 400 mg & Trimethoprim 80 mg Injection	LP/SH FPD KT	A	**Bactrim, Co-Trimoxazole**	i) Severe or complicated infections when oral theraphy is not feasible ii) Treatment and prophylaxis of pneumocystis carinii pneumonia (PCP) in immunocompromised patients.	i) ADULT: 960 mg twice daily increased to 1.44 g twice daily in severe infections. CHILD: 36 mg/kg daily in 2 divided doses increased to 54 mg/kg/day in severe infections ii) Treatment: ADULT & CHILD over 4 weeks: 120 mg/kg/day PO/IV infusion in 2 - 4 divided doses for 14 days. Prophylaxis: ADULT: 960 mg once daily or 960 mg on alternate days (3 times a week) or 960 mg twice daily on alternate days (3 times a week). CHILD 6 weeks - 5 months: 120 mg twice daily on 3 consecutive days or 7 days per week; 6 months - 5 years: 240 mg; 6 - 12 years: 480 mg.
Trimethoprim 300 mg Tablet	LP/SH FPL KT *Paed	B		Treatment of urinary tract infections due to susceptible pathogens.	ADULT: 200 mg daily in 1 or 2 divided doses or 300 mg daily as a single dose. Acute infection: 200 mg twice daily. CHILD: 6 - 12 years: 100 mg twice daily; 6 months - 5 years: 50 mg twice daily. 6 weeks - 5 months: 25 mg twice daily.

8.1.11 ANTILEPROTICS / ANTITUBERCULOUS AGENTS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Dapsone 100 mg Tablet	LP/SH FPL KT	B		i) Leprosy ii) Dermatitis Herpetiformis.	i) ADULT: 6 - 10 mg/kg weekly/ 1.4 mg/kg daily (around 50 - 100 mg daily). CHILD: 1 - 2 mg/kg/day. Maximum: 100 mg/day ii) ADULT: 50 - 300 mg daily.

Ethambutol HCl 400 mg Tablet	LP/SH FPL KT	B		Tuberculosis.	ADULT: 15-25 mg/kg daily (max 1200 mg) or 50 mg/kg biweekly (max 2000mg). CHILD: 15-25 mg/kg daily or 50 mg/kg twice weekly.
Isoniazid 100 mg Tablet	APPL FPL KT	B		i) Tuberculosis ii) Tuberculous meningitis.	i) & ii) ADULT 5-8 mg/kg daily (Max 300 mg) or 15- 20 mg/kg biweekly (max 1200 mg).
Pyrazinamide 500 mg Tablet	APPL FPL KT	B		Tuberculosis.	ADULT: 20-40 mg/kg daily (max 1500 mg) or 50 mg/kg biweekly (max 2000 mg). CHILD: 20-30 mg/kg daily or 30-40 mg/kg thrice weekly.
Rifampicin 150 mg Capsule	APPL FPL KT	B		i) Tuberculosis ii) Leprosy iii) Prophylaxis for meningococcal meningitis iv)Staphylococcus biofilm related prosthetic joint infection or any biofilm sensitive to rifampicin in combination therapy with another antibiotic	i) ADULT: 450 - 600 mg as a single morning dose. CHILD: 10 - 20 mg/kg body weight daily in 1 - 2 doses. Directly observed therapy (DOT): 10 mg/kg twice weekly or 3 times/week. Maximum: 600 mg ii) ADULT: 600 mg/day, CHILD: 10mg/kg iii) ADULT: 600 mg twice daily for 2 days CHILD: 10mg/kg twice daily for 2 days INFANT: 5mg/kg twice daily for 2 days iv) ADULT: 600mg OD CHILD: 10-20mg/kg/day in 1-2 divided doses Dosing is individualised and according to product insert/protocol.
Rifampicin 300 mg Capsule	APPL FPL KT	B		i) Tuberculosis ii) Leprosy iii) Prophylaxis for meningococcal meningitis iv)Staphylococcus biofilm related prosthetic joint infection or any biofilm sensitive to rifampicin in combination therapy with another antibiotic	i) ADULT: 450 - 600 mg as a single morning dose. CHILD: 10 - 20 mg/kg body weight daily in 1 - 2 doses. Directly observed therapy (DOT): 10 mg/kg twice weekly or 3 times/week. Maximum: 600 mg ii) ADULT: 600 mg/day, CHILD: 10mg/kg iii) ADULT: 600 mg twice daily for 2 days CHILD: 10mg/kg twice daily for 2 days INFANT: 5mg/kg twice daily for 2 days iv) ADULT: 600mg OD CHILD: 10-20mg/kg/day in 1-2 divided doses Dosing is individualised and according to product insert/protocol.
Streptomycin Sulphate 1 g Injection	APPL FPD KT	B		i) Tuberculosis ii) Brucellosis iii) Bacterial endocarditis	15 mg/kg daily (Max: 1 g daily) Dosing is according to product insert.
Rifampicin 150mg & Isoniazid 75mg tablet	APPL FPL KT *Medical	B		For pulmonary tuberculosis in which organisms are susceptible in continuation phase treatment for 4 months	30-37kg: 2 tablets once daily, 38-54kg: 3 tablets once daily, 55-70kg: 4 tablets once daily, Above 70kg: 5 tabs once daily
Rifampicin 150 mg, Isoniazid 75 mg, Pyrazinamide 400 mg & Ethambutol HCl 275 mg Tablet	LP/KKM SS *Medical	B	**Akurit-4**	Treatment of both pulmonary and extrapulmonary tuberculosis, in the intensive treatment phase.	ADULT: 30 - 37 kg: 2 tablets daily, 38 - 54 kg: 3 tablets daily, 55 - 70 kg: 4 tablets daily, more than 70 kg: 5 tablets daily.
Ethambutol 100mg Dispersible Tablet	LP/SH FPD KT	A*/A/KK		Treatment of tuberculosis, in the intensive treatment phase.	CHILD: 15-25 mg/kg daily (max 1000 mg)
Rifampicin 75 mg, Isoniazid 50 mg, Pyrazinamide 150 mg Dispersible Tablet	LP/SH FPD KT	A*/A/KK	**3 FDC**	Treatment of tuberculosis, in the intensive treatment phase.	CHILD: 4 - 7 kg: 1 tablet daily, 8 - 11 kg: 2 tablets daily, 12 - 15 kg: 3 tablets daily,16-24 kg: 4 tablets daily more than 25 kg: adult FDC doses recommended

8.1.12 ANTIAMOEBICS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE

Metronidazole 200 mg Tablet	APPL SS	B		Anaerobic infections.	Anaerobic bacterial infections ADULT: Initially, 800 mg followed by 400 mg 8 hly for about 7 days. Other recommended doses: 500 mg 8 hrly or 7.5 mg/kg 6 hrly (max: 4 g in 24 hr). CHILD: 7.5 mg/kg 8 hrly. ELDERLY: Use lower end of adult dose recommendations. Do not admin as a single dose. Prophylaxis of postoperative anaerobic bacterial infections ADULT: 400 mg by mouth 8 hrly in the 24 hr prior to surgery followed postoperatively by IV or rectal admin until oral therapy is possible. Other sources recommend that oral doses be initiated only 2 hr prior to surgery and that number of doses for all admin routes be limited to a total of 4. ELDERLY: Dose reduction may be necessary. Tab: Should be taken with food.
Metronidazole 500 mg/100 ml Injection	APPL SS	A		Anaerobic infections.	ADULT: 500 mg IV infusion 8 hourly. CHILD: 7.5 mg/kg body weight every 8 hours. Neonates: 15 mg/kg LD, followed by 7.5 mg/kg every 12 hourly. 1 month to 18 years: 7.5 mg/kg (maximum 500mg) every 8 hours.
Metronidazole 200 mg/5 ml Suspension	LP/SH FPL KT	B		Anaerobic infection.	CHILD: 7.5 mg/kg 3 times daily for 7 days.

8.2 ANTIFUNGAL MEDICINES

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Amphotericin B 50 mg Injection	APPL FPD KT	A		Systemic fungal infections.	ADULT: 0.25 mg/kg/day by IV infusion, gradually increase if tolerated to 1 mg/kg/day. Maximum in severe cases: 1.5 mg/kg daily or on alternate days. For NEONATES, lower doses are recommended.
Fluconazole 100 mg Capsule	APPL SS	A		i) Cryptococcosis a) cryptococcal meningitis and infections of other sites (e.g., pulmonary, cutaneous) b) Prevention of relapse of cryptococcal meningitis in patients in AIDS after a full course of primary therapy ii) Systemic candidiasis, including candidemia, disseminated candidiasis and other forms of invasive candidal infections. These include infections of the peritoneum, endocardium, eye, and pulmonary and urinary tracts iii) Mucosal candidiasis. a) Oropharyngeal candidiasis b) Chronic oral atrophic candidiasis (denture sore mouth) c) Oesophageal, non-invasive bronchopulmonary infections, candiduria, mucocutaneous candidiasis d) Prevention of relapse of oropharyngeal candidiasis in patients with AIDS, after a full course of primary therapy iv) Genital candidiasis. a) Vaginal candidiasis (acute or recurrent) b) Prophylaxis of recurrent vaginal candidiasis (three or more episodes a year) c) Candidal balanitis v) Prevention of fungal infections in patients with malignancy who are predisposed to such infections as a result of cytotoxic chemotherapy or radiotherapy vi) Dermatomycosis a) Tinea pedis, tinea corporis, tinea cruris and dermal Candida infections b) Tinea versicolor	i) a) 400 mg on Day 1 followed by 200 mg to 400 mg once daily usually at least 6 to 8 weeks for cryptococcal meningitis. CHILD ≥4 weeks-11 years: Treatment: 6-12 mg/kg once daily b) 200 mg once daily indefinitely CHILD Maintenance: 6mg/kg once daily ii) 400 mg on Day 1 followed by 200 mg once daily CHILD ≥4 weeks-11 years: 6-12 mg/kg once daily iii) a) 50 mg to 100 mg once daily for 7 to 14 days CHILD Loading dose: 6mg/kg on Day 1 followed by 3mg/kg daily. b) 50 mg once daily for 14 days concurrently with local antiseptic measures to the denture c) 50 mg to 100 mg once daily for 14 to 30 days CHILD 0-14 days Initially, 6 mg/kg, followed by 3 mg/kg every 72 hours. Max: 12 mg/kg 72 hourly 15-27 days Initially, 6 mg/kg, followed by 3 mg/kg every 48 hours. Max: 12 mg/kg 48 hourly 28 days-11 years Initially, 6 mg/kg, followed by 3 mg/kg once daily. d)150 mg once weekly iv) a) 150 mg as a single oral dose b) 150 mg once-monthly dose may be used for usually 4 to 12 months c) 150 mg as a single oral dose v) 50 mg to 400 mg once daily vi) a) 150 mg once weekly or 50 mg once daily for normally 2 to 6 weeks b) 300 mg once weekly for 2 weeks; a third weekly dose of 300-400 mg An alternate dosing regimen is 50 mg once daily for 2 to 4 weeks. Dosing is individualised and according to product insert/ protocol.

Fluconazole 2 mg/ml Injection	APPL SS	A		i) Cryptococcosis a) cryptococcal meningitis and infections of other sites (e.g., pulmonary, cutaneous) b) Prevention of relapse of cryptococcal meningitis in patients in AIDS after a full course of primary therapy ii) Systemic candidiasis, including candidemia, disseminated candidiasis and other forms of invasive candidal infections. These include infections of the peritoneum, endocardium, eye, and pulmonary and urinary tracts iii) Mucosal candidiasis. a) Oropharyngeal candidiasis b) Chronic oral atrophic candidiasis (denture sore mouth) c) Oesophageal, non‐invasive bronchopulmonary infections, candiduria, mucocutaneous candidiasis d) Prevention of relapse of oropharyngeal candidiasis in patients with AIDS, after a full course of primary therapy iv) Genital candidiasis. a) Vaginal candidiasis (acute or recurrent) b) Prophylaxis of recurrent vaginal candidiasis (three or more episodes a year) c) Candidal balanitis v) Prevention of fungal infections in patients with malignancy who are predisposed to such infections as a result of cytotoxic chemotherapy or radiotherapy vi) Dermatomycosis a) Tinea pedis, tinea corporis, tinea cruris and dermal Candida infections b) Tinea versicolor	i) a) 400 mg on Day 1 followed by 200 mg to 400 mg once daily usually at least 6 to 8 weeks for cryptococcal meningitis. CHILD ≥4 weeks-11 years: Treatment: 6-12 mg/kg once daily b) 200 mg once daily indefinitely CHILD Maintenance: 6mg/kg once daily ii) 400 mg on Day 1 followed by 200 mg once daily CHILD ≥4 weeks-11 years: 6-12 mg/kg once daily iii) a) 50 mg to 100 mg once daily for 7 to 14 days CHILD Loading dose: 6mg/kg on Day 1 followed by 3mg/kg daily. b) 50 mg once daily for 14 days concurrently with local antiseptic measures to the denture c) 50 mg to 100 mg once daily for 14 to 30 days CHILD 0-14 days Initially, 6 mg/kg, followed by 3 mg/kg every 72 hours. Max: 12 mg/kg 72 hourly 15-27 days Initially, 6 mg/kg, followed by 3 mg/kg every 48 hours. Max: 12 mg/kg 48 hourly 28 days-11 years Initially, 6 mg/kg, followed by 3 mg/kg once daily. d)150 mg once weekly iv) a) 150 mg as a single oral dose b) 150 mg once-monthly dose may be used for usually 4 to 12 months c) 150 mg as a single oral dose v) 50 mg to 400 mg once daily vi) a) 150 mg once weekly or 50 mg once daily for normally 2 to 6 weeks b) 300 mg once weekly for 2 weeks; a third weekly dose of 300-400 mg An alternate dosing regimen is 50 mg once daily for 2 to 4 weeks. Dosing is individualised and according to product insert/ protocol.
Griseofulvin 125 mg Tablet	APPL SS	B		Dermatophyte infections of the skin, scalp, hair and nails, where topical therapy has failed or inappropriate.	Adults: 500mg-1000mg daily, taken as a single dose or in divided; Children: 10mg-20mg/kg daily in divided doses. *The dosing is individualized according to product insert / protocol*
Itraconazole 100 mg Capsule	LP/SH FPL KT	A/KK		i) Dermatomycosis including pityriasis versicolor ii) Oral candidosis iii) Palmar tinea manus and plantar tinea pedis iv) Fingernail onychomycosis v) Toenail onychomycosis vi) Vulvovaginal candidiasis.	i) 200 mg once dly for 7 days ii) 100 mg daily for 15 days iii) 200 mg twice daily for 7 days iv) 200 mg twice daily for 1 week per month for 2 months v) 200 mg twice daily for 1 week per month for 3 months vi) 200 mg morning and evening for 1 day or 200 mg once daily for 3 days.
Ketoconazole 200 mg Tablet	LP/SH FPL KT	UKK		Off-label use: Persistent cushing's syndrome despite post-trans-sphenoidal pituitary surgery (TSS)	400mg TDS
Micafungin Sodium 50mg Injection	LP/KKM FPD KT *Medical (Dr Hidayah- (3 pesakit/ setahun)	A*	Mycamine	i) Treatment of invasive candidiasis, including candidemia in adults when intolerance or resistance to Amphotericin B or Fluconazole. ii) Treatment of invasive candidiasis in children.	i) Dosage for adults, adolescents ≥ 16 years of age and the elderly for the treatment of invasive candidiasis: - Body weight > 40kg: 100mg/day* - Body weight ≤ 40kg: 2mg/kg/day* *If patient's response is inadequate, e.g. persistence of cultures or if clinical condition does not improve, the dose may be increased to 200 mg/day in patients weighing > 40kg or 4mg/kg/day in patients weighing ≤ 40kg. Treatment duration for invasive candidiasis: should be a minimum of 14 days. The antifungal treatment should continue for at least one week after two sequential negative blood cultures have been obtained and after resolution of clinical signs and symptoms of infection. ii) Dosage for children: - Body weight ≤ 40kg: 2mg/kg/day; - Body weight > 40kg: 100mg/day

Nystatin 100,000 units/ml Suspension	LP/SH SS	B		Prevention and treatment of candidiasis of the skin and mucous membranes, protection against candidas overgrowth during antimicrobial /corticosteroid therapy and as selective decontamination regimens.	Treatment: Adult & Children: 100,000 to 600,000 units 6 hourly Infant: 100,000 – 200,000 units 6 hourly Neonates: 100,000 units 8 hourly Prophylaxis: Adult: 1,000,000 units daily Neonates and Infants: 100,000 units 2-3 times a day Children: 250,000 – 500,000 units 2-3 times a day
Posaconazole 100 mg MODIFIED RELEASE Tablet	LP/SH FPL KT **(Named-Patient Basis)	UKK		Osteomylitis of left maxillary secondary to invasive fungal infection	300mg BD x 1/7, then 300mg OD
Terbinafine HCl 250 mg Tablet	LP/SH FPL KT	A/KK		Fungal infections especially onchomycosis caused by dermatophytes.	250 mg once daily for 6 weeks for fingernails: 12 weeks for toenails.

8.3 ANTIVIRAL MEDICINES

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Abacavir 300 mg Tablet	LP/SH FPL KT **(Named-Patient Basis)	A*		Antiretroviral combination therapy of HIV infection in adults and adolescents from 12 years of age. Pres. Restrictions29: Patients unsuitable or failed other HAART treatment ii. Patients who have renal impairment (CrCl < 50ml/min) when Abacavir and Lamivudine fixed-dose combination is not recommended	Adult: 300mg twice daily or 600mg daily Children: i. Weighing 14 to <20kg: one-half of a scored abacavir tablet twice daily ii. Weighing ≥20kg to <25kg: one-half of a scored abacavir tablet in the morning and one whole tablet in the evening iii. Weighing at least 25kg: according to adult dose.
Abacavir Sulphate 600 mg and Lamivudine 300 mg Tablet	LP/KKM FPL KT *Medical	A*	**Kivexa**	Antiretroviral combination therapy of HIV infection in adults and adolescents from 12 years of age with the following criteria: i) Patients unsuitable or failed other HAART treatment ii) Patients who are at high risk of renal impairment iii) Patients with osteoporosis or at high risk of bone loss.	ADULTS & ADOLESCENT (> 12 years of age): Recommended dose is one tablet once daily. Not to be used in adults or adolescents weigh less than 40 kg. CHILDREN : Not recommended.
Acyclovir 200 mg Tablet	APPL FPL KT	A/KK		i) Treatment of Herpes simplex & Varicella zoster infections ii) Prophylaxis of Herpes simplex infections in immune-compromised patients	Indication (i) Treatment for Herpes Simplex: ADULT - 200mg 5 times daily; In severely immune-compromised patients: dose can be doubled to 400 mg. CHILD - two years and above should be given adult dosages, infants and children below two years old should be given half the adult dose. Treatment for Varicella Zoster: ADULT - 800mg 5 times daily; CHILD 6 years and over: 800 mg four times daily, 2 - < 6 years: 400 mg four times daily, Under 2 years: 200 mg four times daily. Indication (ii) ADULT - Immune-compromised patients: 200 mg four times daily. Severely immune-compromised patients: dose can be doubled to 400 mg. CHILD - two years and above should be given adult dosages, infants and children below two years old should be given half the adult dose. Dosing is according to Product Information Leaflet.

Acyclovir 800 mg Tablet	LP/SH FPL KT	A/KK		i)Treatment of Herpes simplex & Varicella zoster infections ii)Prophylaxis of Herpes simplex infections in immune-compromised patients	Indication (i) Treatment for Herpes Simplex: ADULT - 200mg 5 times daily; In severely immune-compromised patients: dose can be doubled to 400 mg. CHILD - two years and above should be given adult dosages, infants and children below two years old should be given half the adult dose. Treatment for Varicella Zoster: ADULT - 800mg 5 times daily; CHILD - 6 years and over: 800 mg four times daily, 2 - < 6 years: 400 mg four times daily, Under 2 years: 200 mg four times daily. Indication (ii) ADULT - Immune-compromised patients: 200 mg four times daily. Severely immune-compromised patients: dose can be doubled to 400 mg. CHILD - two years and above should be given adult dosages, infants and children below two years old should be given half the adult dose. Dosing is according to Product Information Leaflet.
Acyclovir 250 mg Injection	APPL SS	A*		i)Treatment of Herpes simplex & Varicella zoster infections ii)Prophylaxis of Herpes simplex infections in immune-compromised patients	ADULT: 5 mg/kg by IV infusion 8 hourly for 5 days, doubled to 10mg/kg every 8 hourly in varicella-zoster in the immunocompromised and in simplex encephalitis (usually given for at least 10 days in encephalitis; possibly for 14 - 21 days). NEONATE & INFANT up to 3 months with disseminated herpes simplex: 20mg/kg every 8 hourly for 14 days (21 days in CNS involvement), varicella-zoster 10-20mg/kg every 8 hourly usually for 7 days. CHILD, 3 months - 12 years: Herpes simplex or Varicella Zoster: 250 mg/m2 8 hourly for 5 days, doubled to 500 mg/m2 8 hourly for varicella-zoster in the immunocompromised and in simplex encephalitis (usually given for 10 days in encephalitis)
Acyclovir 200 mg/5 ml Suspension	LP/SH FPL KT *Paediatric	A*		i) Mucocutaneous Herpes Simplex infection in immunocompromised and AIDS patients ii) Primary and recurrent Varicella Zoster Infection in immunocompromised and AIDS patients iii) Severe Kaposi Varicella Eruption (Eczema herpeticum) iv) Severe primary HSV infections (eg. Neonatal herpes, encephalitis, eczema herpeticum, genital herpes, gingival stomatitis, vaginal delivery with maternal vulva herpes) v) Severe and complicated varicella infection (eg. Encephalitis, purpura fulminans) vi) Severe zoster infection in paediatrics (eg. Encephalitis, purpura fulminans, immunocompromised patients and facial, sacral and motor zoster).	i) ADULT: initially 400 mg 5 times daily for 7 - 14 days. CHILD less than 2 years: 200 mg 4 times daily, CHILD more than 2 years: 400 mg 4 times daily ii), iii) and iv) ADULT: 200 - 400 mg 4 times daily. CHILD: less than 2 years, half adult dose; more than 2 years, adult dose v) ADULT: 800 mg 5 times daily for 7 days vi) ADULT: 20 mg/kg (maximum: 800 mg) four times daily for 5 days, CHILD 6 years: 800 mg four times daily. CHILD less than 2 years; 400mg 4 times daily, more than 2 years; 800mg 4 times daily.
Daclatasvir 60 mg Tablet	LP/KKM FPL KT *Medical (Dr. Hidayah)	A/KK		To be used in combination with other medicinal products for the treatment of chronic hepatitis C (CHC) in adults.	60 mg once daily, to be taken orally with or without meals. Dose recommendation when taking concomitant medicines: i. Strong inhibitors of cytochrome P450 enzyme 3A4 (CYP3A4): Reduce dose to 30 mg once daily when co-administered with strong inhibitors of CYP3A4. ii. Moderate inducers of CYP3A4: Increase dose to 90 mg once daily when co-administered with moderate inducers of CYP3A4. Daclatasvir must be administered in combination with other medicinal products for the treatment of hepatitis C infection. Dose modification of daclatasvir to manage adverse reactions is not recommended.
Ravidasvir 200mg tablet	LP/KKM FPL KT *Medical (Dr. Hidayah)	A/KK		To be used in combination with other medicinal products for the treatment of chronic hepatitis C virus (HCV) infection in adults	200 mg once daily, to be taken orally with or without food. Patients without cirrhosis: Ravidasvir plus sofosbuvir for 12 weeks. Patients with compensated cirrhosis: Ravidasvir plus sofosbuvir for 24 weeks

Dolutegravir 50mg Tablet	LP/KKM FPL KT *Medical (Dr. Hidayah)	A/KK		Dolutegravir is indicated in combination with other anti-retroviral medicinal products for the treatment of Human Immunodeficiency Virus (HIV) infected adults and adolescents above 12 years of age. Prescription Restrictions: For patients who are : - not able to tolerate; or - failing treatment or resistant to first line therapy (efavirenz and nevirapine).	i) HIV-1 patients without documented or clinically suspected resistance to the integrase class: 50 mg (one tablet), once daily, orally. ii) HIV-1 patients with resistance to the integrase class: 50 mg (one tablet), twice daily, orally.
Dolutegravir 50mg, Lamivudine 300mg, Tenofovir Disoproxil Fumarate 300mg Film-Coated Tablets	LP/ SH FPL KT *Medical (Dr. Hidayah)	A/KK		Indicated for use alone as a complete regimen for the treatment of human immunodeficiency virus type 1 (HIV-1) infection in adults and adolescents above 12 years of age weighing 40 kg or greater.	One tablet once daily
Efavirenz 200 mg Tablet	LP/KKM FPL KT	A/KK		Combination therapy for HIV infections with a protease inhibitor and or Nucleoside Reverse Transcriptase Inhibitors (NRTIs).	ADULT: 600 mg once daily. ADOLESCENT & CHILD less than 17 years, more than 40 kg: 600 mg once daily, 32.5 - less than 40 kg: 400 mg once daily, 25 - less than 32.5 kg: 350 mg once daily, 20 - less than 25 kg: 300 mg once daily, 15 - less than 20 kg: 250 mg once daily, 13 - less than 15 kg: 200 mg once daily. No studies in children less than 3 years or less than 13 kg. Formulation unsuitable for children less than 40 kg.
Efavirenz 600 mg Tablet	LP/KKM SS	A/KK		Combination therapy for HIV infections with a protease inhibitor and or Nucleoside Reverse Transcriptase Inhibitors (NRTIs).	ADULT: 600 mg once daily. ADOLESCENT & CHILD less than 17 years, more than 40 kg: 600 mg once daily, 32.5 - less than 40 kg: 400 mg once daily, 25 - less than 32.5 kg: 350 mg once daily, 20 - less than 25 kg: 300 mg once daily, 15 - less than 20 kg: 250 mg once daily, 13 - less than 15 kg: 200 mg once daily. No studies in children less than 3 years or less than 13 kg. Formulation unsuitable for children less than 40 kg.
Entecavir 0.5mg Tablet	LP/KKM FPL KT *Surgical (Name-Patient basis) *Medical (Name-Patient basis)	A*		First line treatment of Chronic Hepatitis B in patients who satisfy the criteria for treatment and require long-term therapy or have a very high baseline viral load	0.5-1mg once daily. Renal Dose Adjustment: 0.5-1mg every 48hours (30-49ml/min); 0.5-1mg every 72hours (10-29ml/min); 0.5mg-1mg every 5-7 days (<10ml/min; HD or CAPD).
Ganciclovir Sodium 50 mg/ml Injection	LP/SH FPD KT *Medical (Dr. Hidayah)	A*		Treatment of cytomegalovirus (CMV) disease in immunocompromised patients, prevention of CMV disease during immunosuppressive therapy following organ transplantation.	Initial: 5 mg/kg infused over 1 hour 12 hourly for 14 -21 days (CMV retinitis treatment) or 7 - 14 days (CMV disease prevention). Long term maintenance: 6 mg/kg daily for 5 days/week or 5 mg/kg daily for 7 days/week.
Lamivudine 100 mg Tablet	LP/KKM FPL KT	A*		Management of chronic hepatitis B infection associated with evidence of hepatitis B viral replication and active liver inflammation.	ADULT: 100 mg once daily. For patients with concomitant HIV infection: 300 mg once daily or in 2 divided doses. CHILD: >2 yr: 3 mg/kg once daily. Max: 100 mg/day.
Lamivudine 150 mg Tablet (3TC)	LP/KKM FPL KT	A/KK		HIV infection in combination with other antiretroviral agents.	ADULT: 150 mg twice daily or 300 mg once daily. INFANT under 1 month: 2 mg/kg twice daily. CHILD 3 month or over: 4 mg/kg twice daily. Maximum 300 mg daily.
Lopinavir 200 mg and Ritonavir 50 mg Tablet	APPL SS	A	Kaletra	Second line treatment for HAART regimen in combination with other anti-retroviral agents	ADULT: (Therapy-naive patients) 400/100 mg bd or 800/200 mg once daily; (Therapy-experienced patients): 400/100 mg bd. Concomitant therapy (efavirenz, nevirapine, amprenavir, fosamprenavir or nelfinavir) 400/100 mg bd. Children >40 kg or w/ BSA >1.4 m2 as adult dose.

Nevirapine 200 mg Tablet	LP/SH FPD KT	A/KK		Treatment of HIV-1 infection in combination with other antiretroviral agents.	Combined with other antiretrovirals: 200 mg once daily for the 1st 14 days; up to 200 mg twice daily if rash does not develop. Re-introduce at a lower dose for the 1st 14 days if treatment is interrupted for >7 days, necessitate reintroduction at a lower dose for the first 14 days.
Oseltamivir 60 mg/5 ml Oral Suspension	APPL FPD KT	A/KK		i) For treatment of patients with suspected or confirmed influenza and severe disease (requiring hospitalization or evidence of lower respiratory tract infection). ii) For treatment of patients with suspected or confirmed influenza and with co-morbidity and associated with increased risk of influenza complications. Not to be used as prophylaxis.	Children ≥ 1 year (for 5 days): a) ≤15 kg: 30mg twice daily b) >15kg to 23kg:45mg twice daily c) >23kg to 40kg: 60mg twice daily Children with body weight more than 40kg who are able to swallow capsule is recommended to be dosed as adults.
Oseltamivir 75 mg Capsule	APPL FPD KT	A/KK		i) For treatment of patients with suspected or confirmed influenza and severe disease (requiring hospitalization or evidence of lower respiratory tract infection) ii) For treatment of patients with suspected or confirmed influenza and with co-morbidity and associated with increased risk of influenza complications. Not to be used as prophylaxis.	Recommended dose in adults and adolescents ≥ 13 years of age and body weight >40kg is 75mg twice daily for 5 days. Dosing adjustment for renal impaired patient, follow manufacturer's recommendations in product insert.
Ribavirin 200mg Capsule	LP/SH FPL KT *Medical	A*		For the treatment of chronic hepatitis C	ADULT (more than 18 years old): 50mg/kg/day Recommended: Body weight: ≤ 75kg should receive 1000mg daily as two 200mg capsules in the morning and three 200mg capsules in the evening Body weight: >75kg should receive 1200mg as three 200mg capsules in the morning and three 200mg capsules in the evening Genotype 1,4: 48 weeks Genotype: 24 weeks duration should be individualized in accordance with the baseline characteristics of the disease.
Sofosbuvir 400 mg Tablet	LP/KKM FPL KT *Medical (Dr. Hidayah)	A/KK		To be used in combination with other medicinal products for the treatment of chronic hepatitis C (CHC) in adults.	One 400 mg tablet, taken orally, once daily with food. Sofosbuvir should be used in combination with other medicinal products. Monotherapy of sofosbuvir is not recommended.
Sofosbuvir 400mg & Velpatasvir 100mg film coated tablet	LP/SH FPL KT *Medical (Dr. Hidayah)	A*, A/KK		For the treatment of chronic hepatitis C virus (HCV) infection in adults PRESCRIBER CATEGORY A/KK: i. Non-cirrhotic patients who are treatment naïve to NS5A inhibitor, or PRESCRIBER CATEGORY A*: ii. With decompensated liver cirrhosis who are treatment naïve to NS5A inhibitor, or iii. For direct-acting antiviral (DAA) experienced patients who failed to achieve sustained virological response (SVR) due to virological failure (preferably based on resistant associated substitution (RAS) report), or iv. Uninfected recipients of liver and non-liver grafts of HCV-viremic donors who are treatment naïve to NS5A inhibitor, or v. HCV-infected recipients post-liver transplant who are treatment naïve to NS5A inhibitor	One tablet, taken orally, once daily with or without food. Refer package insert for the recommended treatment and duration for all HCV genotypes

Tenofovir Disoproxil Fumarate 300 mg Tablet	APPL SS *Medical (Dr. Hidayah)	A*, A/KK		Prescriber Category A*: i. Treatment of HIV-1 infected adults in combination with other antiretroviral agents. ii. Use as first line monotherapy for chronic hepatitis B or as a rescue therapy for patients with drug resistance hepatitis B virus (according to resistant profile or treatment guidelines). Prescriber Category A/KK: iii. For antenatal patients only with chronic Hepatitis B with HBeAg reactive or HBV DNA more than 200,000 or deranged LFT. iv. For adult patients with chronic Hepatitis B (CHB) eAg positive or eAg negative chronic hepatitis For non-cirrhotic liver disease only.	Indication i, ii & iv: 300mg once daily. Renal Dose Adjustment: 300mg every 48hours (30-49ml/min); 300mg every 72hours (10-29ml/min); 300mg every 7 days after dialysis (Hemodialysis). Prescriber Category A/KK: Indication iii: 300mg once daily from 28 weeks of gestation and continue till 4 weeks postpartum
Tenofovir Disoproxil Fumarate 300 mg & Emtricitabine 200 mg Tablet	APPL SS	A/KK	**Tenvir-EM**	i)Treatment of HIV-1 infection in adults in combination with other antiretroviral agent (such as non-nucleoside reverse transcriptase inhibitors or protease inhibitors). ii)Indicated in combination with safer sex practices for pre-exposure prophylaxis (PrEP) to reduce the risk of sexually acquired HIV-1 infection in adults at high risk. *Prescribing restrictions:* i. To prescribe Emtricitabine/Tenofovir Disoproxil as part of a comprehensive prevention strategy ii. All uninfected individuals must be counselled to strictly adhere to the recommended Emtricitabine/Tenofovir Disoproxil dosing schedule iii. A negative HIV-1 test must be confirmed immediately prior to initiating Emtricitabine/Tenofovir Disoproxil. If clinical symptoms consistent with acute viral infection are present and recent (<1 month) exposures are suspected, starting of PrEP must be delayed for at least one month and HIV-1 status need to be reconfirmed, including acute or primary HIV-1 infection; and iv. To screen HIV-1 infection at least once every 3 months while taking Emtricitabine/Tenofovir Disoproxil for PrEP.	One tablet once daily.
Tenofovir Disoproxil Fumarate 300mg, Emtricitabine 200mg & Efavirenz 600mg Tablets (Fixed-dose combination)	LP/SH FPL KT *Medical	A/KK	**Trustiva**	Indicated for the treatment of HIV-1 infection in adults	One tablet once daily taken orally on an empty stomach. Dosing at bedtime may improve the tolerability of nervous system symptoms
Zidovudine 10 mg/ml Syrup	LP/SH FPL KT	A*		i) Management of patients with asymptomatic and symptomatic (early or advanced) HIV infections with CD4 cell counts < 500 cu. mm. ii) Neonatal prophylaxis.	i) HIV infection ADULT: 600 mg daily in divided doses, in combination with other antiretroviral agents. CHILD: 6 wk - 12 yr: 160 mg/m2 every 8 hr. Max: 200 mg every 8 hr. May be used in combination with other anti-retrovirals. Renal and hepatic impairment: Dose reduction may be needed. ii) Prophylaxis of HIV infection in neonates CHILD: Neonates: 2 mg/kg every 6 hr for 1st 6 wk of life, starting within 12 hr after birth. Renal and hepatic impairment: Dose adjustment may be needed.

Zidovudine 1% Injection	LP/SH FPD KT *O&G *Paediatric	A		To reduce the rate of maternal-foetal transmission of HIV in: i) HIV-positive pregnant women over 14 weeks of gestation ii) Their newborn infants.	i) Prophylaxis of maternal-foetal HIV transmission during labour and delivery ADULT: Loading dose: 2 mg/kg, followed by continuous infusion of 1 mg/kg/hr until umbilical cord is clamped. If caesarean section is planned, start the IV infusion 4 hr before the operation. Renal and hepatic impairment: Dose reduction may be needed. HIV infection (to be discuss: not in indication) ADULT: 1-2 mg/kg every 4 hr, given as 2-4 mg/ml infusion over 1 hr. CHILD: As continuous infusion: 20 mg/m2/hr. Alternatively, as intermittent infusion: 120 mg/m2 every 6 hr. Renal impairment: Haemodialysis or peritoneal dialysis: 1 mg/kg every 6-8 hr. ii) Prophylaxis of HIV infection in neonates CHILD: Neonates: 1.5 mg/kg every 6 hr. Start treatment within 12 hr after birth and continue for 1st 6 wk of life. Dose to be given via IV infusion over 30 minutes. Renal impairment: Dose adjustment may be needed.
Zidovudine 300 mg Tablet & Lamivudine 150 mg Tablet	APPL SS	A/KK	Combivir	HIV infection in combination with at least one other antiretroviral drug.	ADULT and CHILD over 12 years: 1 tablet twice daily.

8.4 ANTIPROTOZOAL MEDICINES

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Artemether 20 mg + Lumefantrine 120 mg Tablet	LP/SH FPD KT *Medical	B	Riamet	Acute uncomplicated Falciparum Malaria.	ADULT and CHILD over 12 years weighing over 35 kg : 4 tablets as a single dose at the time of initial diagnosis, again 4 tablets after 8 hours and then 4 tablets twice daily (morning and evening) on each of the following two days (total course comprises 24 tablets). INFANT and CHILD weighing 5 kg to less than 35 kg : A 6 dose regimen with 1 to 3 tablets per dose, depending on body weight.
Artesunate 60 mg Injection	LP/SH FPD KT	B		Treatment of severe malaria in adults and children.	2.4 mg of artesunate/kg body weight, by intravenous (IV) or intramuscular (IM) injection, at 0, 12 and 24 hours, then once daily until oral treatment can be substituted. For adults and children with severe malaria or who are unable to tolerate oral medicines, artesunate 2.4 mg/kg body weight IV or IM given on admission (time = 0), then at 12 hrs and 24 hrs, then once a day for 5-7 days is the recommended treatment.
Primaquine 7.5 mg Base Tablet	APPL FPD KT	B		i) Treatment of malaria ii) Prophylaxis together with a schizonticide such as chloroquine.	0.5mg/kg/day up to 30mg daily
Pyrimethamine 25 mg Tablet	LP/SH FPL KT	UKK		Toxoplasmosis, including ocular infections, proven foetal infection following maternal infection during pregnancy, and toxoplasmosis in immune-deficient patients (for the treatment of toxoplasmosis. Must always be used in combination with a synergistic agent e.g. sulphadiazine).	ADULTS: A loading dose of 100 mg should be given for the first 1 to 2 days, followed by 25 to 50 mg daily. This should be given together with 2 g to 4 g of sulphadiazine daily in divided doses. Immune-deficient aduts and adolescents, based on body-weight, be given for at least 6 weeks: less than 60 kg: pyrimethamine 200 mg orally, followed by 50 mg daily plus sulfadiazine 1 g orally every 6 hours. 60 kg or more: pyrimethamine 200 mg orally, followed by 75 mg daily plus sulfadiazine 1.5 g orally every 6 hours. PAEDIATRIC: Children over 6 years: a loading dose of 100 mg should be given for the first 1 to 2 days followed by 25 mg to 50 mg daily. This should be given together with 2 g to 4 g of sulphadiazine daily in divided doses. Children aged 5 to 6 years: An initial dose of 2 mg/kg (to a maximum of 50 mg) followed by 1 mgkg (to a maximum of 25 mg); combined with sulphadiazine 150 mg/kg (maximum 2 g) daily in four divided doses. Dosage regimens for immune-deficient children are not defined.

8.5 ANTIHELMINTICS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Albendazole 200 mg Tablet	APPL SS	C+		i) Single or mixed infestations of intestinal parasites ii) Strongyloides infection.	i) CHILD 12-24 months: 200 mg as a single dose ii) ADULT & CHILD above 2 years: 400 mg as a single dose for 3 consecutive days; CHILD 12 - 24 months: 200 mg as a single dose for 3 consecutive days.

9 ENDOCRINE

9.1 MEDICINES USED IN DIABETES

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Dapagliflozin 10 mg Tablet	LP/SH SS *Medical *Nephro	A*		Indication 1: Dapagliflozin is indicated for use as an add-on combination therapy in combination with other glucose-lowering medicinal products including insulin, to improve glycemic control in adult patients with type 2 diabetes mellitus when these, together with diet and exercise, do not provide adequate glycaemic control. Indication 2: Dapagliflozin is indicated to reduce the risk of hospitalization for heart failure in adults with type 2 diabetes mellitus and established cardiovascular disease (CVD). Indication 3: To reduce the risk of cardiovascular death and hospitalization for heart failure in adults with heart failure (NYHA class II-IV) with reduced ejection fraction. Prescription restriction: Indication 1: Patients with HbA1c between 6.5%-10.0% while on single / combination anti-diabetic therapy. Indication 2: Patients with HbA1c not more than 10.0% while on adequate trial of metformin. Indication 3: Treatment to be initiated in hospital setting before continuation of treatment for stable patients by Family Medicine Specialist (FMS) in the primary care setting; All patients must be counselled regarding risk of euglycemic ketoacidosis before initiation of treatment.	10 mg once daily
Dulaglutide 1.5mg Solution for Injection in Pre-Filled Pen	LP/SH FPL KT *Surgical (Named-Patient Basis)	UKK		Off-label use: Morbid obesity	1.5mg once weekly
Empagliflozin 25mg tablet	LP/SH FPL KT *Medical (Dr. Hidayah) *Nephro *Visiting Specialist *Dr Goh Chong Ciek	A/KK	Jardiance	Indication 1: Indicated in the treatment of type 2 diabetes mellitus to improve glycaemic control in adults as: Add-on combination therapy: In combination with other glucose–lowering medicinal products including insulin, when these, together with diet and exercise, do not provide adequate glycaemic control. Indication 2: Indicated in patients with type 2 diabetes mellitus (T2DM) and established cardiovascular disease (CVD) to reduce the risk of cardiovascular (CV) death: As an adjunct to diet, exercise and standard of care, to reduce the risk of cardiovascular (CV) death. Indication 3: Indicated to reduce the risk of cardiovascular death and hospitalization for heart failure in adults with heart failure (NYHA class II-IV). Indication 4: For cardiorenal protection in adult patients with chronic kidney disease, with or without type 2 diabetes mellitus, with eGFR ≥20mL/min/1.73m2, or eGFR at least 45mL/min/1.73m2 with a urinary albumin-to-creatinine ratio of ≥200mg/g receiving maximal tolerated treatment with ACEi or ARB.	Indication 1 & 2: - Starting dose is 10 mg empagliflozin once daily for monotherapy and add-on combination therapy with other glucose-lowering medicinal products including insulin. - In patients tolerating empagliflozin 10 mg once daily and need tighter glycaemic control, the dose can be increased to 25 mg once daily. - The maximum daily dose is 25 mg. Indication 3 & 4: 10mg once daily Prescribing Restriction: Indication 1: Patients with HbA1c between 6.5%-10.0% while on single / combination anti-diabetic therapy. Indication 2: Patients with HbA1c not more than 10.0% while on adequate trial of metformin. Indication 3: i. Treatment to be initiated in hospital setting before continuation of treatment for stable patients by Family Medicine Specialist (FMS) in the primary care setting. ii. All patients must be counselled regarding risk of euglycemic ketoacidosis before initiation of treatment
Gliclazide 30 mg Modified Release Tablet	APPL SS	B		Diabetes mellitus type 2.	Initially, 30 mg daily at breakfast time, may increase in successive steps to 60, 90 or 120 mg daily at 1 month intervals. Max daily dose: 120 mg.

Gliclazide 80 mg Tablet	APPL SS	B		Diabetes mellitus type 2.	Initially 40-80 mg daily. A single dose should not exceed 160 mg and when higher doses are required, a twice daily split dosage is advised and should be divided. Maximum daily dose: 320 mg. For elderly, starting dose should be 40 mg twice daily.
Glucagon (Lyophilised) 1 mg/ml Injection	APPL FPD KT	B		Management of hypoglycaemia.	Adult, children > 20 kg: 1 mg by SC, IM or IV. Children < 20 kg : 0.5 mg. If patient does not respond within 10 minutes, administer IV glucose. Repeat in 20 minutes if necessary.
Insulin Aspart 100 IU/ml Injection (Flexpen/ Penfill)	LP/KKM FPL KT *Medical (Dr. Hidayah) *Paediatric	A/KK	NovoRapid	Diabetic Type 1 and 2 in patients that still experienced hypoglycaemia with use of human insulin. *Prescribing Restrictions:* Tertakluk kepada arahan surat Ketua Pengarah Kesihatan dengan no. ruj.: KKM.600-34/1/3 Jld.4(21) bertarikh 21 Ogos 2024 dan garis panduan berkaitan yang dikeluarkan dari semasa ke semasa. Prescribing Restrictions:	Dose to be individualised. The average daily insulin requirement is between 0.5 to 1.0 units/kg body weight.
Insulin Glargine 300 IU/3 ml Prefilled Pen for Injection	LP/KKM FPL KT *Medical (Dr. Hidayah) *Paediatric	A/KK	Lantus	i) Diabetes mellitus type I in adults and child over 6 years ii) Diabetes mellitus type II in adult. Prescribing Restriction: For usage by Endocrinologists/Physicians (in hospitals): Patient must meet the following criteria: i) Patients on insulin not reaching treatment goals defined as high fasting plasma glucose (FPG ≥ 7 mmol/L) and/or HbA1c ≥ 6.5% after 6 months of therapy and/or; ii) patients with a high risk of hypoglycaemia as determined by the following risk factors: Advancing age; Severe cognitive impairment; Poor health knowledge; Increased A1c; Hypoglycaemia unawareness; long standing insulin therapy; Renal impairment; Neuropathy.	ADULT and CHILD over 6 years: individualised dose given by SC, once daily at the same time every day. Adult patients who are insulin naÔve may be initiated with 10 IU daily.
Insulin Recombinant Neutral Human Short Acting 100 IU/ml Injection in 10 ml Vial	APPL SS	B	Actrapid	Diabetes mellitus.	Dose to be individualised. The average daily insulin requirement is between 0.3-1.0 units/kg body weight/day. Daily insulin requirement may be higher in patients with insulin resistance, and lower in patients with residual, endogenous insulin production.
Insulin Recombinant Neutral Human Short-acting 100 IU/ml Penfill and Refill	LP/KKM SS	B	Actrapid Insugen R	Diabetes mellitus.	Dose to be individualised. The average daily insulin requirement is between 0.3-1.0 units/kg body weight/day. Daily insulin requirement may be higher in patients with insulin resistance, and lower in patients with residual, endogenous insulin production.
Insulin Recombinant Synthetic Human Intermediate-Acting 100 IU/ml in Vial for Injection	APPL SS	B	Insulatard	Diabetes mellitus.	Dose to be individualised.The daily insulin requirement is usually between 0.3 and 1.0 IU/kg/day.
Insulin Recombinant Synthetic Human, Intermediate-Acting 100 IU/ml Penfill and Refill	LP/KKM SS	B	Insulatard Insugen N	Treatment of insulin dependent diabetes mellitus, also non insulin-dependent diabetes unresponsive to treatment to diet and or oral hypoglycaemia; hyperkalaemia; to assure proper utilisation of glucose and reduce glucosuria in non diabetic patients receiving parenteral nutrition.	Dose to be individualised.The daily insulin requirement is usually between 0.3 and 1.0 IU/kg/day.
Insulin Recombinant Synthetic Human, Premixed 100 IU/ml Penfill and Refill	LP/KKM SS	B	Mixtard Insugen 30/70	Treatment of insulin dependent diabetes mellitus, also non insulin-dependent diabetes unresponsive to treatment to diet and or oral hypoglycaemia; hyperkalaemia; to assure proper utilisation of glucose and reduce glucosuria in non diabetic patients receiving parenteral nutrition.	Dose to be individualised.The average daily insulin requirement is between 0.5-1.0 units/kg body weight.
Metformin HCl 500 mg Tablet	APPL SS	B		Diabetes mellitus.	Initial: 500mg orally twice daily with food. Maintenance: Titrate in 500 mg increments weekly, doses up to 2000 mg daily may be divided into 2 equal doses.

Metformin HCl 500 mg Extended Release Tablet	LP/SH SS	B		Diabetes mellitus who experienced gastrointestinal side effects with normal metformin.	500 mg once daily. Maximum dose 2000 mg once daily with evening meal.
Vildagliptin 50mg Tablet	LP/KKM SS *Medical	A/KK		Indicated as adjunct to diet and exercise to improve glycaemic control in adults with type 2 diabetes mellitus, as monotherapy when metformin is contraindicated or not tolerated and as add-on therapy to other glucose-lowering agents when adequate glycaemic control is not achieved despite dose optimisation.	ADULT over 18 years: 50mg bd when combine with metformin, 50 mg od when combine with sulphonylurea

9.2 THYROID AND ANTITHYROID MEDICINES

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Carbimazole 5 mg Tablet	APPL SS	B		Hyperthyroidism.	ADULT: Initially 10 - 60 mg daily in divided doses given 8 hourly. Maintenance : 5 - 20 mg daily. CHILDREN >6 years: Initially 15 mg daily in divided doses. CHILDREN 1-6 years: Initially 7.5 mg daily in divided doses.
Cholestyramine Resin 4G	LP/SH FPD KT	A		i) Hypercholesterolemia ii) Familial hypercholesterolemia - heterozygous iii) Generalized atherosclerosis iv) Diarrhoea due to bile acid malabsorption v) Pruritus of skin associated with partial biliary obstruction	Hypercholesterolemia: Adjunct: initial, 4 g orally 1-2 times daily, maintenance, 8 to 16 g in divided doses, max 24 g daily CHILD: 50 - 150 mg/ kg 6 - 8 hourly oral
		UKK		***Off label indication:*** i) Hyperthyroidism when propylthiouracil and carbimazole contraindicated ii) Thyrotoxicosis	4 g QID for 2 weeks
Iodine and Potassium Iodide Solution	LP/SH FP KT	B	Lugol's Solution	i) Pre-operative treatment of thyrotoxicosis ii) Thyrotoxicosis crisis.	i) 1 ml daily in divided doses ii) 5-10 drops (6.25mg per drop) every 6-8 hourly
Levothyroxine Sodium 100 mcg Tablet	APPL SS	B		Hypothyroidism.	Start at low dose and increase at 2-4 weeks interval. ADULT: Initially, 50-100 mcg/day may increase by 25-50 mcg at approximately 3 to 4 weeks intervals until the thyroid deficiency is corrected. Maintenance: 100-200 mcg/day. CHILD; 0-3 months: 10-15 mcg/kg/day; 3-6 months: 8-10 mcg/kg/day; 6-12 months: 6-8 mcg/kg/day; 1-5 years: 5-6 mcg/kg/day; 6 - 12 years: 4 - 5 mcg/kg/day; more than 12 years: 2-3 mcg/kg/day.
Levothyroxine Sodium 50 mcg Tablet	APPL SS *Paediatric	B		Hypothyroidism.	Start at low dose and increase at 2-4 weeks interval. Usual recommended dose for i) Treatment of benign euthyroid goitre: 75-200 mcg. ii) Prophylaxis of relapse after surgery for euthyroid goitre: 75-200 mcg iii) Substitution therapy in hypothyroidism: ADULT Initially, 25-50 mcg/day. Maintenance: 100-200 mcg/day. CHILDREN Initially 12.5-50 mcg/day, Maintenance: 100-150 mcg/m2 body surface area iv) Concomitant supplementation during anti-thyroid drug treatment of hyperthyroidism: 50-100 mcg v) Suppression therapy in thyroid cancer: 150-300 mcg.
Propylthiouracil 50 mg Tablet	LP/SH FPL KT	B		Hyperthyroidism.	ADULT Initially 300-450 mg in 8 hourly intervals (can be given up to 600-900 mg/daily) until symptoms are controlled in 1-2 months. Maintenance 50-150 mg daily for at least 12-18 months. CHILDREN 6-10 years: 50-150 mg. CHILDREN > 10 years: 150- 300 mg daily. All doses are to be given in 3 divided doses daily. Taken with food.

9.3 CORTICOSTEROIDS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE

Dexamethasone 0.5 mg Tablet	LP/SH FPL KT	A		i) Prophylaxis and management of nausea and vomiting in cancer chemotherapy, post-operation and palliative care, ii) Treatment of adrenocortical function abnormalities, iii) Any other treatment requiring corticosteroid therapy.	0.5mg to 10mg daily is given for oral administration. Dose can be titrated up to 20mg daily in severe disease depending on the condition being treated. *The dosing is individualized according to product insert / protocol*
Dexamethasone 4 mg Tablet	LP/SH SS	A		i) Prophylaxis and management of nausea and vomiting in cancer chemotherapy, post-operation and palliative care ii) Treatment of adrenocortical function abnormalities iii) Any other treatment requiring corticosteroid therapy.	0.5mg to 10mg daily is given for oral administration. Dose can be titrated up to 20mg daily in severe disease depending on the condition being treated. *The dosing is individualized according to product insert / protocol*
Dexamethasone Sodium Phosphate 4 mg/ml Injection	APPL SS	B		i) Prophylaxis and management of nausea and vomiting in cancer chemotherapy, post-operation and palliative care, ii) Treatment of adrenocortical function abnormalities, iii) Any other treatment requiring corticosteroid therapy.	i-iii) Initial dosage: 0.5 mg to 20 mg per day depending on the specific disease entity being treated. The total daily dosage should not exceed 80 mg. *The dosing is individualized according to product insert / protocol*
Fludrocortisone Acetate 0.1 mg Tablet	LP/SH FPL KT *Medical (Dr. Hidayah) *Pead	A		As an adjunct to glucocorticoids in the management of primary adrenocortical insufficiency in Addison's disease and treatment of salt-losing adrenogenital syndrome.	Adrenocorticoid insufficiency (chronic): ADULT 1 tablet daily. Salt-losing adrenogenital syndrome: ADULT 1 - 2 tablets daily. CHILD and INFANT 0.5 - 1 tablet daily Dosing is individualised and according to product insert / protocol.
Hydrocortisone 10 mg Tablet	LP/BPFJ SS	B		i) Glucocorticoid replacement therapy in primary or secondary adrenal insufficiencies ii) Congenital adrenal hyperplasia in children	ADULT: 20 - 30 mg daily in divided doses. CHILD: 10-15mg/m2/day in 3 divided dose *The dosing is individualized according to product insert / protocol*
Hydrocortisone Sodium Succinate 100 mg Injection	APPL SS	C		Conditions responsive to systemic or local glucocorticoid injection therapy.	ADULT: Initially 100 - 500 mg IV over 30 seconds to more than 10 minutes. Dose may be repeated at intervals of 2, 4 or 6 hours CHILD: 2-4mg/kg/dose every 6 hourly *The dosing is individualized according to product insert / protocol*
Methylprednisolone Sodium Succinate 0.5 g Injection	LP/SH FPD KT	A		Suppression of inflammatory and allergic disorders, cerebral oedema, immunosuppression treatment of haematological & oncological disorders treatment of shock states & endocrine disorders.	15 - 30 mg/kg daily. Large doses may be repeated 4 - 6 hourly for up to 48 hours.
Prednisolone 5 mg Tablet	APPL SS	B		i) Replacement therapy for primary and secondary adrenocortical insufficiency ii) Adrenogenital syndrome iii) Other therapy.	i) 5 - 25 mg daily in divided doses ii) 10 - 20 mg/m2 body surface daily in divided doses iii) ADULT: 5 - 60 mg daily. CHILD: 0.5 - 2 mg/kg/day in divided doses every 6 - 8 hours or as a single dose daily.
Triamcinolone Acetonide 10 mg/ml Injection	LP/SH FPD KT	A		Inflammation of joints, bursae and tendon sheaths.	Smaller joints: 2.5 - 5 mg and larger joints: 5 - 15 mg. Treatment should be limited to 1 mg/injection site to prevent cutaneous atrophy.

9.4 SEX HORMONES

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE

Hydroxyprogesterone Caproate 250 mg/ml Injection	LP/SH SS *O&G	A		Habitual abortion	IM: 250-500mcg weekly as soon as pregnancy has been confirmed by diagnosis.
Somatropin 6mg solution for injection	LP/SH FPL KT *Pead **(Named-Patient Basis)	A*		i) Growth failure due to inadequate endogenous growth hormone ii) Growth failure in girls due to gonadal dysgenesis (Turner syndrome) iii) Growth failure in short children born small gestational age (SGA) *For paediatric consultants/specialists use only This medicine is for the following patients who will require the specific features of the supplied device for treatment optimization: 1. Young infants or toddlers who need very precise dose administration (for example 0.19 mg, 0.27 mg and etc.) 2. Other older patients who are unable to tolerate or who have poor medication compliance with other growth hormone preparations	i) 0.025-0.035mg/kg/day ii) 0.045-0.05mg/kg/day iii) 0.035 mg/kg/day
Testosterone 250 mg/ml Injection	LP/SH FPL KT	A*		i. In male: Testosterone replacement therapy for male hypogonadism, when testosterone deficiency has been confirmed by clinical features and biochemical test. ii. In female: Additive therapy in cases of advanced breast cancer in postmenopausal women.	By IM only. Hypogonadism 250 mg every 2-3 weeks. To maintain an adequate androgenic effect 250 mg every 3-6 weeks. Potency disorders 250 mg every 4 weeks. Male climateric disorders: 250 mg every 3-4 weeks. Repeated 6-8 weeks courses at 2-3 months interval.

9.5 HYPOTHALAMIC AND PITUITARY HORMONES AND ANTIOESTROGENS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Desmopressin 120mcg Sublingual Tablet	LP/SH SS	A		i) Central diabetes insipidus ii) Primary nocturnal enuresis iii) Treatment of nocturia associated with nocturnal polyuria in adults	i) 60mcg 3 times daily sublingually (daily dose range from 120mcg to 720mcg) ii) 120mcg once daily at bedtime, sublingually (maximum dose 240mcg) iii) 60mcg once daily at bedtime (dose range from 120mcg to 240mcg)
Desmopressin Acetate 4 mcg/ml Injection	LP/SH FPD KT *Medical (Dr. Hidayah) *Anaes	A		Central Diabetes Insipidus.	Adults 1-4 mcg 1-2 times daily. Children above the age of 1 year 0.4-1 mcg 1-2 times daily. Children below the age of 1 year 0.2-0.4 mcg 1-2 times daily.
Octreotide 0.1 mg/ml Injection	APPL FPD KT *Medical (Dr. Hidayah) *Surgical	A		i) Acromegaly treatment in patients in whom surgery or radiotherapy is inappropriate or ineffective- based on level of growth hormone and high IGF- 1 and residual pituitary tumor ii) Relief of symptoms associated with functional gastro-entero-pancreatic (GEP) endocrine tumors: • Carcinoid tumors with features of the carcinoid syndrome. • VIPomas, Glucagonomas • Gastrinomas/Zollinger-Ellison syndrome • Insulinomas • GRFomas. iii) Prevention of complications following pancreatic surgery iv) Emergency management of bleeding gastro-eosophageal varices in patients with cirrhosis	i) Initially 0.05-0.1mg SC every 8 or 12 hours. Optimal daily dose is 0.3mg, not to exceed maximum dose of 1.5mg/day. ii) Initially 0.05 mg once or twice daily, gradually increase to 0.1-0.2mg 3 times daily. Higher doses may be required in exceptional circumstances. iii) 0.1 mg 3 times daily for 7 consecutive days, starting on the day of operation, at least 1 hour before laparotomy iv) ADULT: 50mcg bolus, followed by continuous infusion of 25-50mcg/hour for 2-5 days. CHILD: IV 1-5 mcg/kg/hour *The dosing is individualized according to product insert / protocol*

Synthetic ACTH (Tetracosactrin Acetate) 250 mcg/ml Injection	LP/SH FPD KT *Medical (Dr. Hidayah)	A		Diagnostic test to differentiate primary adrenal from secondary (pituitary) adrenocortical insufficiency.	Diagnostic test for investigation of adrenocortical insufficiency Adult: As plain preparation: Measure plasma cortisol concentration immediately before and exactly 30 min after IM/IV inj of 250 mcg. Post-inj rise in plasma cortisol concentration ≥200 nmol/l (70 mcg/l) if normal adrenocortical function. As depot preparation (if inconclusive results with plain preparation): Measure plasma cortisol concentration before and exactly 30 min, 1, 2, 3, 4 and 5 hr after an IM inj of 1 mg tetracosactide acetate depot. Adrenocortical function normal if the post-inj rise in plasma cortisol concentration increases 2- fold in 1st hr, and continues to rise steadily. Expected levels in 1st hr: 600-1,250 nmol/l, increasing slowly up to 1000-1800 nmol/l by 5th hr. Child: IV 250 mcg/1.73 m2 BSA. Intramuscular.
Terlipressin 1 mg Injection	LP/KKM FPD KT *Medical (Dr. Hidayah) * Surgical	A*		i. Acute oesophageal variceal bleeding ii. Treatment of type 1 hepatorenal syndrome, characterised by spontaneous acute renal insufficiency, in patients suffering from severe cirrhosis with ascites.	indikasi i: 2 mg IV bolus over 1 minute. Maintenance: 1 - 2 mg IV bolus 4 - 6 hourly until bleeding is controlled, up to 24 - 36 hours. The maximum daily dosage is 120-150 mcg/kg body weight. indikasi ii: Terlipressin is usually started at a dose of 1 mg of terlipressin acetate every 4-6 hours. The dose can be increased to a maximum of 12 mg daily, or 2 mg every 4-6 hours, if serum creatinine levels has not decreased by at least 25% after 3 days of treatment. As an alternative to bolus injection, terlipressin can be administered as a continuous intravenous (IV) infusion with a starting dose of 2 mg of terlipressin acetate/24 hours and increased to a maximum of 12 mg of terlipressin acetate/24 hours.
Vasopressin 20 units/ml Injection	LP/SH FPD KT *Anaes * Surgical *A&E *Medical	A		i) Pituitary diabetes insipidus ii) Oesophageal variceal bleeding.	i) 5 - 20 units SC or IM every 4 hours ii) 20 units in 100 - 200 ml 5% dextrose saline over 15 minutes as infusion which may be repeated after at intervals of 1 - 2 hours. Maximum: 4 doses.

9.6 MEDICINES AFFECTING BONE METABOLISM

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Alendronate Sodium 70 mg and Cholecalciferol 5600 IU Tablet	LP/KKM SS *Ortho *Medical	A*	Fosamax Plus	i) Osteoporosis in postmenopausal women with a history of vertebral fracture and whom oestrogen replacement therapy is contraindicated ii) Male Osteoporosis.	1 tablet once weekly [70 mg/5600 IU]. Patient should receive supplemental calcium or vitamin D, if dietary vitamin D inadequate. The tablet should be taken at least half an hour before the first food, beverage, or medication of the day with plain water only. To facilitate delivery to stomach and thus reduce the potential for esophageal irritation, it should only be swallowed upon arising for the day with a full glass of water and patient should not lie down for at least 30 minutes and until after their first food of the day.
Alendronate Sodium 70 mg Tablet	LP/SH FPL KT *Ortho (Mr. Kamal) *Nephro (Named-Patient Basis)	A*, A/KK		Kategori preskriber A*: Osteoporosis (Male) Kategori preskriber A/KK: Indicated for the treatment of osteoporosis in high-risk postmenopausal women. (Osteoporosis in postmenopausal women with a history of vertebral fracture and whom oestrogen replacement therapy is contraindicated.)	70 mg once weekly. Swallow the tablet whole with a full glass of plain water only on an empty stomach at least 30 minutes before breakfast (and any other oral medication); stand or sit upright for at least 30 minutes and do not lie down until after eating breakfast.
Denosumab in 1.0 ml Solution (60 mg/ml) Pre-filled Syringe (subcutaneous Injection)	LP/SH FPL KT *Ortho (Mr. Kamal)	A*	Prolia	Post-menopausal Osteoporosis. (To be used by Orthopaedic Specialist, Rheumatologist and Endoocrinologist) .	A single subcutaneous injection of 60 mg administered once every 6 months. Patient should receive calcium and vitamin D supplements whilst undergoing treatment.
Pamidronate Disodium 30 mg Injection	LP/SH FPD KT *All HODs	A*		Hypercalcaemia of malignancy (tumour-induced hypercalcemia).	Dose depends on the initial serum calcium levels. Doses range from a single infusion of 30 - 90 mg.

9.7 MISCELLANEOUS ENDOCRINE

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Bromocriptine Mesylate 2.5 mg Tablet	APPL SS	A/KK		i) Hypogonadism, galactorrhoea, infertility in men and women, cyclical benign breast and menstrual disorders ii) Acromegaly iii) Hyperprolactinaemia, prolactinomas iv) Parkinson's disease	i) Initial dose of 1.25-2.5mg once daily at bedtime. Dose may be increased by 2.5mg/day every 3 to 7 days as tolerated to a total of 5 to 7.5mg daily in divided doses ii) 1.25 - 2.5 mg at bedtime for 3 days and may be increased by 1.25 - 2.5 mg every 3 to 7 days up to 30 mg a day in divided doses iii) Initial dose of 1.25mg, two or three times a day. Increase dosage gradually over several weeks to 10 - 20mg a day in divided doses. Higher doses may be required iv) Initial dose of 1.25 mg one or two times a day. Dose may be increased by 2.5mg/day increments in 2 -to 4-week intervals as needed. Maintenance dose ranges from 10 to 30mg daily in divided doses. Dosing is individualised and according to product insert/protocol
Cabergoline 0.5 mg Tablet	APPL FPL KT *O&G *Medical	A*		i) Inhibition of physiological lactation soon after parturition ii) Suppression of established lactation iii) Treatment of hyperprolactinaemic disorders	i) 1 mg as a single dose during the first post-partum day ii) 0.25 mg every 12 hours for 2 days iii) Initial: 0.5 mg/week given in one or two divided weekly doses. May gradually increase dose by 0.5 mg/week no sooner than every 4 weeks until an optimal therapeutic response is achieved. Usual dose range: 0.25 mg to 2 mg/week (higher doses >1 mg /week may be divided in as many as 3 to 4 divided doses)
Danazol 200 mg Capsule	APPL FPL KT	A/KK		i) Endometriosis ii) Benign breast disorders including gynaecomastia fibrocystic breast disease and pubertal breast hypertrophy iii) Menorrhagia iv) Prophylaxis of hereditary angioedema	i. 400mg daily in 2 to 4 divided doses, starting on the 1st day of the menstrual cycle; daily doses of 800mg are also employed. ii. 100mg to 400mg daily in divided dose. iii. 200 mg BD iv. 400 mg daily. Reduce to 200 mg daily after 2 months attack free period. General dosing range: 200-800mg daily in 2 or 4 divided doses. Dosing is individualised and according to product insert/protocol
Dextrose Powder	LP/SH FP KT	B		Use as a diagnostic agent for diabetes.	75 g stat.
Triptorelin 3.75 mg Injection	LP/SH FPL KT *O&G	A		i) Treatment of confirmed central precocious puberty (preterm sexual development) (before 8 years in girls and 10 years in boys) ii) Genital and extragenital endometriosis (stage I to stage IV). Treatment should not be administered for more than 6 months. It is not recommended to start a second treatment course with triptorelin or another GnRH analogue.	1 intramuscular injection every 4 weeks. The treatment must be started in the first 5 days of the menstrual cycle. The duration of treatment depends on the initial severity of the endometriosis and the changes observed in the clinical features. In principle, the treatment should be administered for at least 4 months and for at most 6 months. It is not recommended to start a second treatment course with triptorelin or another GnRH analogue.
Triptoreline 11.25mg Powder and Solvent for Suspension for Injection	LP/SH FPL KT *Pead (off label indikasi)-(Named-Patient Basis)	UKK		***Off label indication:*** Treatment of confirmed central precocious puberty (preterm sexual development)	11.25mg 12 weekly untill 12 years olds

10 OBSTETRICS & GYNAECOLOGY

10.1 HORMONE REPLACEMENT THERAPY

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Conjugated Oestrogens 0.625 mg Tablet	LP/SH FPL KT *O&G	A		i. Prevention and management of osteoporosis associated with estrogen deficiency. ii. Female hypoestrogenism. iii. Moderate to severe vasomotor symptoms associated with estrogen deficiency. iv. Atrophic vaginitis and atrophic urethritis.	i) 0.3 - 0.625 mg daily ii) 0.3- 1.25mg daily for 3weeks, then off for 1 week iii) & iv) 0.3mg-1.25mg daily

Dydrogesterone 10 mg Tablet	LP/KKM SS *O&G	A/KK		i) Dysmenorrhoea ii) Endometriosis iii) Dysfunctional uterine bleeding (to arrest & to prevent bleeding) iv) Threatened abortion v) Habitual abortion vi) Post menopausal complaints (hormone replacement therapy in combination with oestrogen).	i) 10 mg bd from day 5 - 25 of cycle ii) 10 mg bd - tds from day 5 - 25 of the cycle or continuously iii) To arrest bleeding: 10 mg bd with an oestrogen once daily for 5 - 7 days, To prevent bleeding: 10 mg bd with an oestrogen once daily from day 11 - 25 of the cycle iv) 40 mg at once, then 10 mg 8 hourly until symptoms remit v) 10 mg bd until 20th week of pregnancy vi) 10-20 mg daily during last 12-14 days of each cycle.
Estradiol Valerate 1mg Tablet	LP/SH FPL KT *Pead **(Named-Patient Basis)	UKK		As hormone replacement therapy in patient with premature ovarian failure.	0.5mg OD
Estradiol 1 mg with Dydrogesterone 5 mg Tablet	LP/SH FPL KT *O&G	A*	Femoston Conti 1/5	i) Hormone replacement therapy for the relief of symptoms due to oestrogen deficiency in women with a uterus ii) Prevention of postmenopausal osteoporosis in women with a uterus	One tablet is to be taken daily for a 28-day cycle.
Estradiol Valerate 2 mg (11 tabs) and Norgestrel 500 mcg & Estradiol Valerate 2 mg (10 tabs) Tablet	LP/SH FPL KT *O&G *Medical (Endocrinology)	B	**Progyluton**	i. Hormone replacement therapy (HRT) for the treatment of signs and symptoms of estrogen deficiency due to menopause or hypogonadism, castration or primary ovarian failure in women with an intact uterus. ii. Prevention of postmenopausal osteoporosis. iii. Control of irregular menstrual cycles. iv. Treatment of primary or secondary amenorrhea.	One white tablet daily for the first 11 days, followed by one light brown tablet daily for 10 days then stop for a 7- day tablet-free interval before commencing next pack
Medroxyprogesterone Acetate 5 mg Tablet	APPL SS	B		i) Secondary amenorrhoea ii) Abnormal uterine bleeding due to hormonal imbalance.	i) 5-10 mg daily for 5-10 days started anytime during cycle ii) 5-10 mg daily for 5-10 days on day 16-21 of menstrual cycle. Optimum secretory transformation 10 mg daily for 10 days from day 16 of the cycle.

10.2 INFERTILITY

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Chorionic Gonadotrophin Human (HCG) 5000 IU Injection	LP/SH FPL KT *O&G	A*		In the female: i. Ovulation induction in subfertility due to anovulation or impaired follicle-ripening. ii. Preparation of follicles for puncture in controlled ovarian hyperstimulation (for assisted reproductive technologies). iii. Luteal phase support. In the male: iv)Hypogonadotropic hypogonadism(also cases of idiopathic dysspermias have shown a positive response to gonadotropins), v) Delayed puberty associated with insufficient gonadotropic pituitary function vi) cryptorchidism not due to an anatomic obstruction.	i & ii: 5,000-10,000 IU stat once optimal stimulation of follicular growth is achieved. iii: Up to three repeat injections of 1000 to 3000 IU may be given within 9 days following ovulation or embryo transfer (E.g.: on day 3, 6 and 9 after ovulation induction) iv) 1000 - 2000 IU, two to three times per week v)1500IU two to three times weekly for at least six months vi) < 2 years of age: 250 IU twice weekly for six weeks < 6 years of age: 500 - 1000 IU twice weekly for six weeks > 6 years of age: 1500 IU twice weekly for six weeks. Dosing is individualised and according to product insert / protocol.
Clomiphene Citrate 50 mg Tablet	LP/SH SS	A		Treatment of ovulatory failure in women desiring pregnancy	Initial: 50 mg once daily for 5 days. Increase to 100mg OD for 5 days if there is no response (commence as early as 30 days after the previous course).

10.3 PROSTAGLANDIN AND OXYTOCICS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE

Carbetocin 100 mcg/ml Injection	LP/SH FPD KT	A*		Prevention of uterine atony and postpartum hemorrhage following elective cesarean section under epidural or spinal anaesthesia.	A single IV dose of 100 mcg (1 ml) is adminitered by bolus injection, slowly over 1 minute, only when delivery of the infant has been completed by caesarean section under epidural or spinal anaesthesia, before or after delivery of the placenta.
Carboprost Tromethamine 250 mcg Injection	LP/KKM FPD KT *O&G	A*		Treatment of refractory postpartum haemorrhage unresponsive to conventional methods of management.	Initially 250 mcg deep IM inj. The dose may be repeated at intervals of 15-90 min if necessary. Max total dose: 2000 mcg (8 doses).
Dinoprostone (Prostagladine E2) 3 mg Vaginal Tablet	APPL SS	A		Induction of labour.	3 mg vaginal tablet to be inserted high into the posterior formix. A second 3 mg tablet may be inserted after 6-8 hours if labour is not established. Max 6 mg.
Misoprostol 200mcg Tablet	LP/SH FPD KT *O&G (Named-Patient Basis)	UKK		Treatment of miscarriage and termination of pregnancy	<14 weeks: 600 mcg orally single-dose or 400 mcg sublingually single-dose ≥14 weeks: 400 mcg sublingually, vaginally or buccally 3-hourly (providers should use caution and clinical judgement to decide the maximum number of doses of misoprostol in pregnant individuals with prior uterine incision)
Oxytocin 10 units/ml Injection	APPL SS	B		i. Induction of labour ii. Inadequate uterine effort iii. Management of third stage of labour iv. Prevention and treatment of post-partum haemorrhage v. As adjunctive therapy for the management of incomplete, inevitable or missed abortion	i & ii) Intiate at 2 milliunits/min, may be increased by 4 miliunits/min gradually at 30 minute intervals. Dose may be decreased once a contraction pattern similar to normal labour is achieved and labor has progressed to 5 - 6 cm dilation. Maximum dose of oxytocin for multiparae - 16 miliunits/min and nulliparae-32 miliunits/min. iii) IV/IM: 5 -10 units iv) IV : 5-10 units followed by IV infusion at 10 units/hour The dosing is individualized based on maternal, fetal response and product insert / protocol
Oxytocin 5 units & Ergometrine Maleate 0.5 mg/ml Injection	APPL SS	C+	Syntometrine	i)Prevention and treatment of postpartum haemorrhage associated with uterine atony. ii)Active management of third stage of labour	i) 1 ml IM, may be repeated after 2 hours. Should not exceed 3 ml within 24 hours ii) For routine management of third stage of labour, 1 ml IM following delivery of the anterior shoulder or immediately after delivery of the child.

10.4 TREATMENT OF VAGINAL AND VULVAL CONDITIONS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Clotrimazole 500 mg Vaginal Tablet	LP/SH SS	B		Vaginal candidiasis.	500 mg as a single one-time dose.
Conjugated Oestrogens 0.625 mg/g Cream	LP/SH FPL KT	A		Treatment of atrophic vaginitis, dyspareunia and kraurosis vulvae	i. Atrophic Vaginitis and Kraurosis Vulvae: Initial dose: Intravaginal 0.5g daily for 21 days and then off for 7 days (cyclical regimen). Dose range: 0.5- 2g daily based on individual response. ii. Dyspareunia: 0.5g intravaginally twice weekly continuous regimen or in a cyclic regimen of 21 days of therapy followed by 7 days off of therapy.

10.5 CONTRACEPTIVES

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Copper 375 mm2 Intrauterine Device	LP/SH FPD KT	B		Intrauterine contraception.	Intrauterine insertion: 1 unit to be replaced within 5 years from the date of insertion.
Etonogestrel 68mg Implant	APPL FPL KT	A/KK		Contraception	Subdermal insertion: A single implant is effective for 3 years (to be removed 3 years from the date of insertion)
Levonorgestrel 1.5 mg Tablet	LP/SH FPD KT *O&G	A*		Emergency contraception within 72 hours of unprotected sexual intercourse for the female victim of sexual violence to prevent uwanted pregnancy.	1.5 mg as a single dose as soon as possible, preferably within 12 hours but no later than 72 hours after unprotected sexual intercourse
Medroxyprogesterone Acetate 50 mg/ml Injection	LP/KKM FPD KT	B		Prevention of pregnancy and to provide long term contraception.	150 mg to be administered once every 3 month.

10.6 MISCELLANEOUS OBSTETRICS & GYNAECOLOGY

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Cyproterone Acetate 2 mg & Ethinyloestradiol 0.035 mg Tablet	LP/SH FPL KT *O&G	A*	**Diane 35**	i. Treatment androgen dependent diseases (including PCOS) in women ii.Treatment of acne as second line treatment following failure of topical therapy or systemic antibiotic treatment iii.Hormonal contraceptive	1 tablet daily for 21 consecutive days, followed by a 7 -day tablet free interval before the next pack is started
Dienogest 2 mg Tablet	LP/SH FPL KT *O&G	A/KK		Treatment of endometriosis.	One tablet daily. Treatment can be started on any day of menstrual cycle. Tablets must be taken continously without regard to vaginal bleeding.
Raloxifene HCl 60 mg tablet	LP/KKM FPL KT *Medical	A*		i. Treatment and prevention of osteoporosis in postmenopausal women. ii. Risk reduction of invasive breast cancer in postmenopausal women with osteoporosis.	1 tablet daily.

11 GENITOURINARY

11.1 ANTISPASMODICS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Hyoscine N-Butylbromide 1 mg/ml Liquid	LP/SH FP KT	B		Gastrointestinal tract and genito-urinary tract spasm, dyskinesia of the biliary system.	ADULT 10-20 mg, 3-4 times a day. CHILD 6-12 years old: 10 mg 3 times a day.
Hyoscine N-Butylbromide 10 mg Tablet	APPL SS	C		Gastrointestinal tract and genito-urinary tract spasm, dyskinesia of the biliary system.	ADULT 10-20 mg, 3-4 times a day. CHILD 6-12 years old: 10 mg 3 times a day.
Hyoscine N-Butylbromide 20 mg/ml Injection	APPL SS	B		Gastrointestinal tract and genito-urinary tract spasm, dyskinesia of the biliary system.	20 mg IM / IV repeated after 30 min if needed. Max 100 mg daily.Not recommended for CHILD below 12 years. *Dosing is individualised and according to product insert/protocol*

11.2 MEDICINES FOR URINARY RETENTION

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Alfuzosin 10 mg Tablet	LP/KKM SS	A*		Treatment of functional symptoms related with benign prostatic hypertrophy (BPH).	10 mg once a day pre bed.
Doxazosin Mesylate 4 mg CR Tablet	LP/KKM SS	A*		Benign Prostatic Hyperplasia.	4 mg once daily to maximum 8 mg/day.
Dutasteride 0.5 mg Capsule	APPL FPL KT	A*		Benign prostatic hyperplasia (BPH) in men with an enlarged prostate gland.	0.5 mg daily.
Dutasteride 0.5 mg and Tamsulosin 0.4 mg Capsule	APPL FPL KT	A*	Duodart	Combination therapy for the treatment of moderate to severe symptoms of BPH with: i) Large prostate (>30g) ii) Poor risk or not fit for surgery iii)Those who are awaiting their turn for surgery.	One capsule daily.
Finasteride 5 mg Tablet	LP/KKM SS	A*		Treatment & control of benign prostatic hyperplasia.	5mg once daily

Tamsulosin HCl 400 mcg Extended Release Tablet	LP/KKM SS	A*		Second line treatment of functional symptoms of benign prostatic hyperplasia (BPH) in patients who do not tolerate first line drugs or when first line drugs are inappropriate or contraindicated.	400 mcg once daily.
Terazosin HCl 2 mg Tablet	APPL SS	A/KK		i) For treatment of Benign Prostatic Hyperplasia ii) Hypertension.	i) Initial dose: 1 mg at bedtime. Maintenance dose: 5-10 mg once daily ii) Initial dose: 1 mg at bedtime. Maintenance dose: 1- 5 mg once daily. Max: 20-40 mg/day.

11.3 MEDICINES FOR URINARY FREQUENCY, ENURESIS AND CONTINENCE

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Mirabegron 50mg Prolonged Release Tablet	LP/SH FPL KT *Surgical	A*		Symptomatic treatment of urgency, increased micturition frequency and/or urgency incontinence as may occur in adult patients with overactive bladder (OAB) syndrome. Prescribing Restrictions: For patients who are not responsive, intolerant or unsuitable to use other existing agents.	50mg once daily. Should be taken once daily, with liquid, swallowed whole and is not to be chewed, divided, or crushed

11.4 MISCELLANEOUS GENITOURINARY

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Potassium Citrate 3 g/10 ml & Citric Acid Mixture	APPL SS	C	**Pot. Citrate/ Pot. Cit.**	For systemic or urinary alkalinization	ADULT: 10-20 ml 3 times daily, well diluted with water. CHILD up to 1 year: 2.5 ml 3 times daily; 1 - 5 years: 5 ml 3 times daily; 6 - 12 years: 10 ml 3 times daily. To be taken well diluted with water, after meals and at bedtime.
Sodium Bicarbonate, Citric Acid, Sodium Citrate & Tartaric Acid - 4 g per Sachet	LP/KKM SS *Limit for 2 days (UKT/JPL/locum)	B	**Ural**	For relieving of discomfort in mild UTI, symptomatic relief of dysuria to enchance the action to certain antibiotics especially some sulphonamides. In gout as urinary alkalinizers to prevent cystallisation of urates.	4 - 8 g (1- 2 sachets) dissolved in a glass of cold water 4 times daily as prescribed.
Sodium Citrate, Citric Acid Mixture 3 g/10 ml	LP/SH FP KT	B		Citrates and citric acid solutions are used to correct the acidosis of certain renal tubular disorders to treat metabolic acidosis for long-term urine alkalinization for prevention and treatment of uric acid and calcium kidney stones and as nonparticulate neutralizing buffers.	ADULT: 10 - 20 ml well diluted with water. CHILD: Up to 1 year : 2.5 ml tds, 1-5 year 5 ml tds; 6-12 years 10 ml tds. To be taken well diluted with water.
Sodium Citrate 500 mg & Citric Acid 334 mg/5 ml Solution	LP/SH FP KT	GALENICAL PRODUCT	Modified SHOHL'S Solution	Acidosis or systemic alkalization, Gastric acid buffer.	Acidosis or systemic alkalization: oral 10 to 30 ml 4 times daily. Gastric acid buffer: oral 15 ml as a single dose (ADULT).

12 MEDICINES AFFECTING IMMUNE RESPONSE

12.1 IMMUNOSUPPRESSANTS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Azathioprine 50 mg Tablet	APPL SS	A		i) Prophylaxis of rejection in organ and tissue transplant ii) Auto-immune diseases iii) Rheumatoid arthritis.	i) ADULT: 1-5 mg/kg/day. Adjust dose according to clinical response and haematological tolerance. Dose may also be given via IV administration. ii) ADULT: 1-3 mg/kg/day. Discontinue treatment if there is no improvement after 12 week. iii) ADULT: Initially, 1 mg/kg/day given in 1-2 divided doses for 6-8 week, may increase by 0.5 mg/kg every 4 week until response or up to 2.5 mg/kg/day. Maintenance: Reduce dose gradually to achieve the lowest effective dose.

Baricitinib 2mg film-coated tablets	LP/SH FPD KT	A*		1. Treatment of moderate to severe active rheumatoid arthritis in adult patients who have responded inadequately to, or who are intolerant to one or more disease-modifying anti-rheumatic drugs. May be used as monotherapy or in combination with methotrexate. 2. Indicated for the treatment of severe atopic dermatitis in adult patients who are candidates for systemic therapy. *Prescribing Restrictions:* 1. Severe active rheumatoid arthritis: To be prescribed by Rheumatologist only 2. Severe atopic dermatitis: i. As fourth line of treatment in patients who have failed / have contraindications / experienced adverse events to: • Intensive and optimized topical treatment • Phototherapy • At least two immunosuppressants ii. To be prescribed by Dermatologists only.	1. Severe active rheumatoid arthritis: 4mg once daily 2. Severe atopic dermatitis: The recommended dose of baricitinib is 4 mg once daily with or without food and may be taken at any time of the day. A dose of 2 mg once daily is appropriate for patients such as those aged ≥ 75 years and may be appropriate for patients with a history of chronic or recurrent infections. A dose of 2 mg once daily should be considered for patients who have achieved sustained control of disease activity with 4 mg once daily and are eligible for dose tapering. Baricitinib can be used with or without concomitant topical therapies (Refer package insert)
Everolimus 0.25mg Tablet	LP/KKM FPL KT *Nephro	A*	Certican	Indicated for the prophylaxis of organ rejection in adult patients at low to moderate immunological risk receiving an allogeneic renal or cardiac transplant in combination with ciclosporin for microemulsion and corticosteroids	An initial dose regimen of 0.75 mg b.i.d., which is recommended for the general kidney and heart transplant population. The daily dose of everolimus should always be given orally in two divided doses (b.i.d.)
Everolimus 0.75mg Tablet	LP/KKM FPL KT *Nephro	A*	Certican	Indicated for the prophylaxis of organ rejection in adult patients at low to moderate immunological risk receiving an allogeneic renal or cardiac transplant in combination with ciclosporin for microemulsion and corticosteroids	An initial dose regimen of 0.75 mg b.i.d., which is recommended for the general kidney and heart transplant population. The daily dose of everolimus should always be given orally in two divided doses (b.i.d.)
Mycophenolate Sodium 180mg Tablet	LP/KKM FPL KT *Nephro	A*	Myfortic	Prophylaxis of acute transplant rejection in adult patients receiving allogenic renal transplant in combination with ciclosporin and corticosteroids	720 mg twice daily
Mycophenolate Sodium 360mg Tablet	LP/KKM FPL KT *Nephro	A*	Myfortic	Prophylaxis of acute transplant rejection in adult patients receiving allogenic renal transplant in combination with ciclosporin and corticosteroids	720 mg twice daily
	*Medical (Name-Patient basis)-)-off label indikasi	UKK		***Off Label indication:*** CTD/Myositis ILD with underlying overlap syndrome (Allergic to Mycofit, failed drug re challenge)	720 mg twice daily
	*Pead (Name-Patient basis)-off label indikasi	UKK		***Off Label indication:*** *Steroid resistant nephrotic syndrome*	*360 mg twice daily*
Mycophenolate Mofetil 250 mg Tablet	APPL FPL KT *Nephro	A*	Mycofit Cellcept	i) Prophylaxis of acute organ rejection in patients receiving allogenic renal, cardiac and hepatic transplant ii.Used with steroids for induction and maintenance of lupus nephritis	i) Renal transplant rejection: ADULT: 1 g twice daily. CHILD (3 months and older): 600 mg/m(2)/dose, twice daily; maximum daily dose, 2 g/10 mL. Cardiac transplant rejection: 1.5 g twice daily. Hepatic transplant rejection: 1.5 g twice daily ii) Induction phase: 2 - 3 g/day for up to 6 months. Maintenance phase: dose gradually tapers to 1 g/day.
Mycophenolate Mofetil 500 mg Tablet	APPL FPL KT *Nephro *Medical	A*	Mycofit Cellcept	i) Prophylaxis of acute organ rejection in patients receiving allogenic renal, cardiac and hepatic transplant ii.Used with steroids for induction and maintenance of lupus nephritis	i) Renal transplant rejection: ADULT: 1 g twice daily. CHILD (3 months and older): 600 mg/m(2)/dose, twice daily; maximum daily dose, 2 g/10 mL. Cardiac transplant rejection: 1.5 g twice daily. Hepatic transplant rejection: 1.5 g twice daily ii) Induction phase: 2 - 3 g/day for up to 6 months. Maintenance phase: dose gradually tapers to 1 g/day.
	*Opthal (off label indikasi)			***Off Label Indication:*** *i) Active moderate to severe thyroid eye disease*	*500mg BD (for off label indication)*

Tacrolimus 0.5mg Prolonged-Release Hard Capsule	LP/SH FPL KT *Nephro	A*	Advagraf	i) Prophylaxis of transplant rejection in adult kidney or liver allograft recipients. ii) Treatment of kidney or liver allograft rejection resistant to treatment with other immunosuppressive medicinal products in adult.	a) Kidney Transplant: Tacrolimus PR therapy should commence at dose of 0.20-0.30 mg/kg/day administered once daily in the morning. Administration should commence within 24 hours after completion of surgery. b) Liver Transplant Tacrolimus PR therapy should commence at a dose of 0.10-0.20 mg/kg/day administered once daily in the morning. Administration should commence within 12-18 hours after completion of surgery. ii) Treatment of allograft rejection: For conversion: a) From other immunosuppressants to once daily Tacrolimus PR: Treatment should begin with the initial oral dose recommended in kidney and liver transplantation respectively for prophylaxis of transplant rejection. b) From Tacrolimus to Tacrolimus PR: Allograft transplant patients maintained on twice daily Tacrolimus capsules dosing requiring conversion to once daily Tacrolimus PR should be converted on a 1:1 (mg:mg) total daily dose basis. Tacrolimus PR should be administered in the morning.
Tacrolimus 1mg Prolonged-Release Hard Capsule	LP/SH FPL KT *Nephro	A*	Advagraf	i) Prophylaxis of transplant rejection in adult kidney or liver allograft recipients. ii) Treatment of kidney or liver allograft rejection resistant to treatment with other immunosuppressive medicinal products in adult.	i) Prophylaxis of transplant rejection: a) Kidney Transplant: Tacrolimus PR therapy should commence at dose of 0.20-0.30 mg/kg/day administered once daily in the morning. Administration should commence within 24 hours after completion of surgery. b) Liver Transplant Tacrolimus PR therapy should commence at a dose of 0.10-0.20 mg/kg/day administered once daily in the morning. Administration should commence within 12-18 hours after completion of surgery. ii) Treatment of allograft rejection: For conversion: a) From other immunosuppressants to once daily Tacrolimus PR: Treatment should begin with the initial oral dose recommended in kidney and liver transplantation respectively for prophylaxis of transplant rejection. b) From Tacrolimus to Tacrolimus PR: Allograft transplant patients maintained on twice daily Tacrolimus capsules dosing requiring conversion to once daily Tacrolimus PR should be converted on a 1:1 (mg:mg) total daily dose basis. Tacrolimus PR should be administered in the morning.
Tacrolimus 5mg Prolonged-Release Hard Capsule	LP/KKM FPL KT *Nephro	A*	Advagraf	i) Prophylaxis of transplant rejection in adult kidney or liver allograft recipients. ii) Treatment of kidney or liver allograft rejection resistant to treatment with other immunosuppressive medicinal products in adult	i) Prophylaxis of transplant rejection: a) Kidney Transplant: Tacrolimus PR therapy should commence at dose of 0.20-0.30 mg/kg/day administered once daily in the morning. Administration should commence within 24 hours after completion of surgery. b) Liver Transplant Tacrolimus PR therapy should commence at a dose of 0.10-0.20 mg/kg/day administered once daily in the morning. Administration should commence within 12-18 hours after completion of surgery. ii) Treatment of allograft rejection: For conversion: a) From other immunosuppressants to once daily Tacrolimus PR: Treatment should begin with the initial oral dose recommended in kidney and liver transplantation respectively for prophylaxis of transplant rejection. b) From Tacrolimus to Tacrolimus PR: Allograft transplant patients maintained on twice daily Tacrolimus capsules dosing requiring conversion to once daily Tacrolimus PR should be converted on a 1:1 (mg:mg) total daily dose basis. Tacrolimus PR should be administered in the morning
Tacrolimus 0.5 mg Capsule	LP/KKM FPL KT *Nephro	A*	Prograf	i) Primary immunosuppression in liver and kidney allograft recipients. ii) Liver and kidney allograft rejection resistant to conventional immunosuppressive agents. It is recommended to be used concomitantly with adrenal corticosteroids. Because of the risk of anaphylaxis. Injection should be reserved for patients unable to take capsules only.	 0.1-0.2 mg/kg/day for liver transplantation and at 0.15-0.3 mg/kg/day for kidney transplantation administered as 2 divided doses.

Tacrolimus 1 mg Capsule	LP/KKM FPL KT *Nephro	A*	Prograf	i) Primary immunosuppression in liver and kidney allograft recipients. ii) Liver and kidney allograft rejection resistant to conventional immunosuppressive agents. It is recommended to be used concomitantly with adrenal corticosteroids. Because of the risk of anaphylaxis. Injection should be reserved for patients unable to take capsules only.	0.1-0.2 mg/kg/day for liver transplantation and at 0.15-0.3 mg/kg/day for kidney transplantation administered as 2 divided doses.
Tacrolimus 5 mg Capsule	LP/KKM FPL KT *Nephro	A*	Prograf	i) Primary immunosuppression in liver and kidney allograft recipients. ii) Liver and kidney allograft rejection resistant to conventional immunosuppressive agents. It is recommended to be used concomitantly with adrenal corticosteroids. Because of the risk of anaphylaxis. Injection should be reserved for patients unable to take capsules only.	0.1-0.2 mg/kg/day for liver transplantation and at 0.15-0.3 mg/kg/day for kidney transplantation administered as 2 divided doses.

12.2 IMMUNOMODULATORS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Ciclosporin 25 mg Capsule	APPL FPL KT *Nephro	A*		Only for: i) Patients in whom donor specific transplantation cannot be carried out and in young children to minimise side-effects of steroids. ii) Follow-up cases of bone marrow transplant iii) Patients with severe rheumatoid Arthritis not responding to other second line drugs. iv) Patients with idiopathic nephrotic syndrome who are steroid toxic or poor response to cyclophosphamide. v) Severe aplastic anemia, pure red cell aplasia vi) Cases of recalcitrant psoriasis and atopic eczema vii) Treatment of chronic ocular inflammatory disorders/uveitis	i & ii) Initially 12.5 - 15 mg/kg/day, beginning on the day before transplant. Maintenance approx 12.5 mg/kg/day for 3 - 6 months before being tapered off to zero by 1year of transplantation. iii) 3 mg/kg/day in 2 divided doses for first 6 weeks. May increased gradually to max 5 mg/kg. Treatment withdrawn if no response after 3months. iv) ADULT: 5 mg/kg/day in 2 divided doses. CHILD: 6 mg/kg/day in 2 divided doses.Patients with permitted levels of kidney failure, the starting dose must not >2.5 mg/kg/day. v) 12 mg/kg/day. vi) 2.5 mg/kg/day in 2 divided doses increasing if there is no improvement after 4 weeks by 0.5 -1 mg/kg/month up to max. 5 mg/kg/day. vii) 5 mg/kg/day in 2 divided doses, may increase to 7 mg/kg/day in resistant cases. Maintenance: Less than 5 mg/kg/day especially during remission.

13 HAEMATOLOGY/ ONCOLOGY

13.1 CYTOTOXIC MEDICINES

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Imatinib Mesylate 400mg Tablet	APPL FPL KT *Surgical	A*		i) ADULT and CHILD: Philadelphia positive (Ph+) chronic myeloid leukaemia in chronic phase and in early acceleration after failure of interferon therapy ii) Treatment of patients with unresectable and/or metastatic malignant gastrointestinal stromal tumours (GIST) who are positive for CD117/c-kit	i) ADULT: Chronic phase chronic myeloid leukemia: 400 mg once daily. Accelerated phase or blast crisis chronic myeloid leukemia: 600 mg once daily. CHILD more than 2 years, chronic and advanced phase chronic myeloid leukemia: 340 mg/m2 daily. Max: 800 mg/day ii) ADULT : 400mg/day
Methotrexate 25 mg/ml Injection	APPL FP KT *Medical *Skin *O&G	A		i) Solid tumours ii) Gestational trophoblastic disease iii) Acute leukaemia/lymphomas iv) Rheumatoid arthritis, psoriatic arthropathy, severe / erythrodermic psoariasis.	i) 50 mg/m2 once every 2 - 3 weeks in combination with other drugs. ii) 50 mg IV Day 1, 3, 5, 9 every 3 weeks. For high risk gestational trophoblastic disease, use 100 mg/m2 as part of EMA-CO regime. iii) High dose regimes: 500-3000 mg/m2 per dose may be used, employing the 500 mg preparations. CHILD: CNS prophylaxis for acute leukaemia 2 gm/m2 over 24 hours with folinic acid rescue, 3 doses for B-cell lineage. 4 doses for T-lineage all every 3 weeks. relapse acute lymphoblastic leukaemia (ALL): 1 gm/m2 over 36 hours with folinic acid rescue every 3 weeks for 9 doses, maintenance: 50 mg/m2 every 2 weeks. B-cell lymphoma: 3 gm/m2 over 3 hours with folinic acid rescue for three doses. Methotrexate level monitoring recommended when using high dose regimens. The 500 mg strength is not for intrathecal use. Dosage for Intrathecal (IT) treatment and prophylaxis in leukaemia: less than 1 year: 5 mg, 1 - 2 years: 7.5 mg, 2 - 3 years: 10 mg, more than 3 years:12.5mg. IT preparation must be clearly stated/verified. ENSURE THAT PREPARATION IS SUITABLE FOR INTRATHECAL USE. iv) Dose used by rheumatologist: 10-15mg IM injection or oral weekly. Dose used by dermatologist: 10-25 mg IM inj weekly.

Methotrexate 2.5 mg Tablet	LP/KKM SS	A		i. Antineoplastic Chemotherapy - Treatment of gestational choriocarcinoma, and in patients with chorioadenoma destruens and hydatidiform mole. - Palliation of acute lymphocytic leukemia - Treatment and prophylaxis of meningeal leukemia. - Palliation of acute lymphoblastic (stem-cell) leukemias in children. - Alone or in combination with other anticancer agents in the management of breast cancer, epidermoid cancers of the head and neck, and lung cancer, particularly squamous cells and small cell types. - Treatment of the advanced stages (III and IV, Peters Staging System) of lymphosarcoma, particularly in those cases in children; and in advanced cases of mycosis fungoides. ii. Psoriasis Chemotherapy Symptomatic control of severe, recalcitrant, disabling psoriasis which is not adequately responsive to other forms of therapy, but only when the diagnosis has been established, as by biopsy and/or after dermatologic consultation. iii. Rheumatoid arthritis	*Dosing is individualised and according to product insert / protocol.*
Palbociclib 125mg Capsules	LP/KKM FPL KT *Surgical	A*		Indicated for the treatment of hormone receptor (HR)-positive, human epidermal growth factor receptor 2 (HER2)-negative locally advanced or metastatic breast cancer in combination with an aromatase inhibitor as initial endocrine based therapy in postmenopausal women.	*125 mg capsule taken orally once daily for 21 consecutive days followed by 7 days off treatment to comprise a complete cycle of 28 days.* *Palbociclib should be taken with food. For dose modification, refer package insert*
Zoledronic Acid 4 mg Injection	LP/KKM FPD KT *Surgical	A*		i) Treatment of hypercalcaemia of malignancy ii) Prevention of skeletal related events (SREs) in patients with multiple myeloma involving multiple bone lesions iii) Prevention of skeletal related events (SREs) for metastatic cancers of solid tumours	i) 4mg single dose ii) 4mg every 3-4 weeks iii) 4mg reconstituted and should be given as a 15- minute IV infusion every 12 weeks (as advised in MaHTAS 2018 Report)

13.2 SEX HORMONES AND HORMONE ANTAGONIST IN MALIGNANT DISEASE

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Anastrozole 1 mg Tablet	LP/KKM FPL KT *Surgical	A*		Hormonal therapy in breast cancer in post-menopausal women if failed /contraindicated with Tamoxifen	1 mg daily
Letrozole 2.5 mg Tablet	LP/KKM FPL KT *Surgical	A*		Hormonal therapy in breast cancer in post-menopausal women if failed /contraindicated to Tamoxifen	2.5 mg once daily.
Tamoxifen Citrate 20 mg Tablet	APPL SS	A		Breast cancer.	20 mg in 1-2 divided doses. Max: 40 mg/day.
Exemestane 25 mg Tablet	LP/KKM FPL KT *Surgical	A*		Treatment of post-menopausal women with advanced breast cancer whose disease has progressed following tamoxifen and non-steroidal aromatase inhibitors	25 mg once daily
Goserelin 3.6 mg Depot Injection	LP/KKM FPL KT *Surgical	A		Androgen deprivation therapy in prostate cancer, endometriosis,leiomyoma uteri and assisted reproduction,breast cancer in premenopausal and perimenopausal women suitable for hormonal manipulation	One 3.6 mg depot injected subcutaneously into the anterior abdominal wall, every 28 days.
Zoledronic Acid 4 mg Injection	LP/KKM FPL KT *Surgical	A*		i) Treatment of hypercalcaemia of malignancy ii) Prevention of skeletal related events (SREs) in patients with multiple myeloma involving multiple bone lesions iii) Prevention of skeletal related events (SREs) for metastatic cancers of solid tumours	i) 4mg single dose ii) 4mg every 3-4 weeks iii) 4mg reconstituted and should be given as a 15- minute IV infusion every 12 weeks (as advised in MaHTAS 2018 Report)

13.3 MEDICINES FOR BLEEDING DISORDER

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE

Filgrastim (G-CSF) 30 MU/ml Injection	APPL FPD KT	A*		i) Prevention and treatment of febrile neutropenia due to cancer chemotherapy (except chronic myeloid leukaemia and myelodysplastic syndrome) ii) Haemopoeitic stem cell transplantation (HSCT)/stem cell harvesting	i) ADULT: SC or IV 5 mcg/kg/day. Initiation: 24 - 72 hours after chemotherapy. Duration: Until a clinically adequate neutrophil recovery is achieved (absolute neutrophil count of at least 1 x 109/L on 2 consecutive days) ii) Refer to protocol.

13.4 MISCELLANEOUS HAEMATOLOGY/ ONCOLOGY

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Leucovorin Calcium (Calcium Folinate) 15 mg Tablet	LP/SH FPL KT	A		i) Treatment of folic acid antagonist overdose; ii) Leucovorin (folinic acid) plus tegafur-uracil combination therapy is indicated for the treatment of colorectal cancer in: a) Metastatic stage, b) Adjuvant setting, c) Concurrent setting.	i) 15 mg every 6 hours for the next 48 – 72 hours; ii) Metastatic stage – Leucovorin Calcium 30 mg TDS, Day 1-28, rest 7 days for 5 cycles Adjuvant setting – Leucovorin Calcium 30 mg TDS, Day 1-28, rest 7 days for 5 cycles; Concurrent setting – Leucovorin Calcium 25 mg /day, D8- D36, for 4 weeks Dosing is individualised and according to product insert/protocol
Leucovorin Calcium (Calcium Folinate) 10 mg/ml Injection	APPL FP KT	A		(i) Biochemical modulator for 5-Fluorouracil in the treatment of solid tumour; (ii) As rescue for high dose methotrexate; (iii) Megaloblastic anaemias due to deficiency of folic acid	i) 200mg/m2 by slow IV injection over a minimum 3 minutes, followed by 5-Fluorouracil or 20mg/m2 IV followed by 5-Fluorouracil. In both cases, treatment is repeated daily for 5 days; may repeat at 4-week intervals for 2 courses then 4- to 5-week intervals ii) 15 mg (approximately 10mg/m2) every 6 hours for 10 doses, starting 24 hours after the beginning of the methotrexate infusion iii) Up to 1 mg daily Dosing is individualised and according to product insert/protocol

14 NUTRITION & BLOOD DISORDER

14.1 FLUIDS AND ELECTROLYTES

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Calcium Chloride Dihydrate, Sodium Chloride, Magnesium Chloride Hexahydrate, Sodium Acetate Trihydrate, Potassium Chloride, and Malic Acid Solution	LP/SH SS	A	Sterofundin ISO	Replacement of extracellular fluid losses in the case of isotonic dehydration, where acidosis is present or imminent.	The maximum infusion rate depends on the needs of the patient in fluid replacement and electrolytes, patient's weight, clinical condition, and biological status. Adults, elderly, adolescents: 500 ml-3 L/24 hr. Babies, children: 20 ml to 100 ml/kg/24 hr.
Compound Sodium Lactate (Hartmanns Solution)	APPL SS	C		Replacement of extracellular losses of fluid and electrolytes, as an alkaliniser agent.	100-1000 ml IV or according to the needs of the patient.
Dextrose 5 % Injection	APPL SS	B		For parenteral replenishment of fluid and minimal carbohydrate calories as required by the clinical condition of the patient.	According to the needs of the patient.
Dextrose 10 % Injection	APPL SS	B		For parenteral replenishment of fluid and minimal carbohydrate calories as required by the clinical condition of the patient.	According to the needs of the patient.
Dextrose 20 % Injection	APPL FP KT	B		For parenteral replenishment of fluid and minimal carbohydrate calories as required by the clinical condition of the patient.	According to the needs of the patient.
Dextrose 50 % Injection	LP/SH SS	B		For parenteral replenishment of fluid and minimal carbohydrate calories as required by the clinical condition of the patient.	According to the needs of the patient.
Human Albumin Injection 20 %	APPL FPD KT	B		i) Acute hypovolemic shock ii) Hypoproteinaemia iii) Restoration and maintenance of circulating blood volume in cases of volume deficiency where the use of a colloid is indicated.	Dosing is according to product insert/ protocol.

Modified Fluid Gelatin 4% Injection	APPL SS	B		For primary volume replacement in hypovolaemia, peri-operative stabilization of the circulation, haemodilution, extracorporeal circulation (haemodialysis and heart-lung machine).	ADULT: 500-1500 ml given as IV infusion.
Oral Rehydration Salt	LP/KKM SS	C	**ORS**	Replacement of fluid and electrolytes loss in diarrhoea.	ADULT: 200 - 400 ml (1 - 2 sachets) for every loose motion. CHILD: 200 ml (1 sachet) for every loose motion. In severe dehydration 100 ml/kg for 3 - 4 hours. INFANT: 1 - 1.5 times their usual feed volume (50 ml per stool for small infant).
Peritoneal Dialysis Solution (1.5% Dextrose)	APPL SS	B		For chronic renal diseases requiring dialysis and acute renal failure.	Dose depending on clinical cases.
Peritoneal Dialysis Solution (4.25% Dextrose)	APPL FP KT	B		For chronic renal diseases requiring dialysis and acute renal failure.	Dose depending on clinical cases.
Potassium Chloride 1 g/10 ml Injection	APPL SS	B	**KCl**	For the correction of severe hypokalaemia and when sufficient potassium cannot be taken by mouth.	By slow IV infusion depending on the deficit or the daily maintenance requirements. 1 g diluted in 500 ml normal saline or glucose and given slowly over 2-3 hours.
Potassium Chloride 1 g/10 ml Mixture	LP/SH FP KT GALENICAL PRODUCT	C	**KCl**	Potassium depletion.	1 g once or twice daily until serum potassium is restored.
Potassium Chloride 600 mg SR Tablet	APPL SS	B	**KCl**	For the treatment and specific prevention of hypokalaemia.	ADULT: 2 - 3 tablets daily. Severe deficiency: 9 - 12 tablets daily or according to the needs of the patient.
Sodium Bicarbonate 8.4% (1 mmol/ml) Injection	APPL SS	B	**NaHCO3**	i) For acceleration of excretion in drug intoxication (where excretion of the drug into the urine is accelerated by elevated urine pH) ii) For metabolic acidosis secondary to underlying diseases.	According to the needs of the patient. In severe shock due to cardiac arrest: 50 ml IV.
Sodium Bicarbonate Powder (1 g & 5 g)	LP/SH FP KT	GALENICAL PRODUCT	**NaHCO3**	i) Relief of discomfort in mild urinary tract ii) Alkalinisation of urine	i) 3 g in every 2 hours until urinary pH exceeds 7 ii) Maintenance of alkaline urine 5-10 g daily
Sodium Chloride 1 g /5 ml Mixture	LP/SH FP KT	GALENICAL PRODUCT	**NaCl**	Sodium depletion.	1 g once or twice daily until serum sodium is restored.
Sodium Chloride 0.18% with Dextrose 10% Injection	LP/SH SS	B		For replenishing fluid and energy and for restoring/maintaining the concentration of sodium and chloride ions.	According to the needs of the patient.

Sodium Chloride 0.18% with Dextrose 4.23% Injection	APPL SS	B		For replenishing fluid and energy and for restoring/maintaining the concentration of sodium and chloride ions.	According to the needs of the patient.
Sodium Chloride 0.45% Injection	APPL SS	B	**NaCl**	For replenishing fluid and for restoring / maintaining the concentration of sodium and chloride ions.	100 - 1000 ml IV or according to the needs of the patient.
Sodium Chloride 0.9% Injection	APPL(500ml) LP/SH (100ml) BPFJ (10ml) SS	C+	**NaCl**	For replenishing fluid and for restoring / maintaining the concentration of sodium and chloride ions.	100 - 1000 ml IV or according to the needs of the patient.
Sodium Chloride 0.45% with Dextrose 10% Injection	LP/SH FP KT	B		For replenishing fluid and energy and for restoring or maintaining the concentration of sodium and chloride ions.	According to the needs of the patient.
Sodium Chloride 0.45% with Dextrose 5% Injection	LP/SH SS	B		For replenishing fluid and energy and for restoring /maintaining the concentration of sodium and chloride ions.	According to the needs of the patient.
Sodium Chloride 0.9% with Dextrose 5% Injection	APPL SS	C+		For replenishing fluid and energy and for restoring / maintaining the concentration of sodium and chloride ions.	According to the needs of the patient.
Sodium Chloride 20% Injection	LP/SH SS	B	**NaCl**	Addition of sodium electrolyte in parenteral nutrition bags especially in paediatrics / neonates with restricted fluid allowance.	According to the needs of the patient.
Sodium Chloride 3% Injection	LP/SH SS	B	**NaCl**	Acute dilutional hyponatraemia.	According to the needs of the patient.
Sodium Glycerophosphate for addition into infusion solution, 20 ml vial	LP/SH FPD KT *Anaes *Surgical	A		Indicated in adult patients and infants as a supplement in intravenous nutrition to meet the requirement of phosphate.	Adults: The recommended dosage is individual. The recommended daily dosage of phosphate during intravenous nutrition would normally be 10-20 mmol. This can be met by using 10-20 ml of sodium glycerophosphate to the infusion solution or to the admixture for which compatibility has been proved. Infants: The recommended dosage is individual. The recommended dose for infants and neonates is 1.0-1.5 mmol/kg bodyweight/day.
Water for Injection	APPL SS	C+		As diluent and vehicle for the administration of medications.	According to the needs of the patient.

14.2 INTRAVENOUS NUTRITION

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Amino Acids Injection	APPL SS	A	*Vaminolact *Aminoplasmal 15% *Dipeptivan	Source of amino acids in patients needing IV nutrition.	Dose to be individualised. ADULT usually 500-2000 ml by IV. ADULT usual requirement for amino acid: 1-2 g/kg/day.
Amino Acids, Glucose and Lipid with Electrolytes Injection	LP/SH FP KT	A	*SmofKabiven Peripheral 800 kcal *Smofkabiven Central *Periolimel	Source of amino acids, carbohydrate, lipid and electrolytes in patients needing IV nutrition	Dose to be individualised. ADULT: 500 - 2000 ml daily given by IV. ADULT usual requirement for amino acid 1-2 g/kg/ day, carbohydrate 4-6 g/kg/day, lipid 2-3 g/kg/day
Trace Elements and Electrolytes (Adult) Solution	LP/SH SS	A*	Addamel N	Only to be used to cover daily loss of electrolyte and trace elements for patient on parenteral nutrition	10 ml added to 500-1000 ml solution, given by IV infusion

Trace Elements and Electrolytes (Paediatric) Solution	LP/SH SS	A*	Peditrace	Only to be used to cover daily loss of electrolyte and trace elements for patient on parenteral nutrition	According to the needs of the patient. INFANT and CHILD weighing 15 kg or less: Basal requirements of the included trace elements are covered by 1 ml/kg/day to a maximum dose of 15 ml. CHILD weighing 15 kg or more, a daily dose of 15 ml, should meet basic trace element requirements. However, for patients weighing more than 40 kg the adult preparation trace element should be used
Freeze-dried Mixt of all Water-Soluble vit: Vit B1 2.5 mg, Vit B2 3.6 mg, Nicotinamide 40 mg, Vit B6 4 mg, Pantothenic Acid 15 mg, vit C 100 mg, Biotin 60 mcg, Folic Acid 0.4 mg, Cyanocobalamin 5 mcg	LP/SH SS	B	Soluvit N (Water Soluble Vitamin for Neonate)	As a supplement in IV nutrition to meet the daily requirements of water-soluble vitamins in adults and children.	Adult and Children Weighing ≥10 kg: The recommended daily dosage is the content of 1 vial. Children Weighing <10 kg: Should be given 1/10 of the content of 1 vial/kg body weight/day.
Vit A 3330 iu, Vit D2 200 iu, Vit E 10 iu, Vit K1 150 mcg per ml	LP/SH SS	B	Vitalipid N Adult	As a supplement in IV nutrition to meet the daily requirements of the fat-soluble vit A, D2, E & K1.	Adult and children aged 11 years and above. One ampoule (10 mL) of Vitalipid N Adult is added to 500 mL Intralipid 10% or 20%. After mixing by gentle agitation the emulsion is infused as described for intralipid. The daily maintenance dosage of the vitamins A, D2, E and K1 are thereby supplied.
Vit A 230 iu, Vit D2 40 iu, Vit E 0.7 iu, Vit K1 20 mcg per ml	LP/SH SS	B	Vitalipid N Infant	As a supplement in IV nutrition to meet the daily requirements of the fat-soluble vit A, D2, E & K1.	Infants and children >2.5 kg and <11 years: 10 mL/day. Pre-term and Infants <2.5 kg: 4 mL/kg body weight/day.
6% soybean oil, 6% medium chain triglycerides, 5% olive oil, 3% fish oil	LP/SH FP KT	A	Smoflipid 20%	Smoflipid is indicated in adults as a source of calories and essential fatty acids for parenteral 4 nutrition when oral or enteral nutrition is not possible, insufficient, or contraindicated.	Recommended dosage depends on age, energy expenditure, clinical status, body weight, tolerance, ability to metabolize, and consideration of additional energy given to the patient. The usual daily dosage in adults is 1 to 2 grams/kg per day and should not exceed 2.5 grams/kg per day.

14.3 MINERALS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Calcium Carbonate 500 mg Tablet	LP/KKM SS	B		i) Hyperphosphatemia (phosphate binder) in chronic kidney disease patients ii) Calcium supplementation	i) Total dose of elemental calcium from calcium-based phosphate binder not to exceed 1,500 mg/day. Dosing is individualised based on serum phosphate level and according to product insert/protocol ii) 500 mg to 4g per day as calcium carbonate in 1-3 divided doses (500mg capsule contains 200mg elemental calcium) *Dosing is individualised based on serum calcium level and according to product insert/protocol*
Calcium Gluconate 10% Injection	LP/KKM SS	B		i) Acute hypocalcaemia ii) Hypocalcaemic tetany iii) Cardiac resusitation.	i) ADULT: 1-2 g (2.2-4.4 mmol). CHILD: 50 mg/kg/dose (0.5ml/kg/dose) IV short infusion over at least 10 to 20 minutes, per dose. Max: 20ml per dose. ii) ADULT 1 g (2.2 mmol) by slow IV injection followed by continuous infusion of 4 g (8.8 mmol) daily iii) IV or intracardiac injection, 1g (2.2 mmol). *Dosing is individualised and according to product insert/ protocol .*
Calcium Lactate 300 mg Tablet	APPL SS	C		For prophylaxis of calcium deficiency and treatment of chronic hypocalcaemia.	ADULT 300mg-600mg (as elemental Ca) daily in divided doses. *Dosing is individualised and according to product insert/ protocol.*

Cinacalcet Hydrochloride 25mg tablet	LP/SH FPL KT *Nephro	A*		Secondary hyperparathyroidism in patients undergoing maintenance dialysis with hypercalcaemia. Prescribtion restriction: For treatment of refractory secondary hyperparathyroidism in patients with end-stage renal disease (including those with calciphylaxis) only in those: i) who have 'very uncontrolled' plasma levels of intact parathyroid hormone (defined as greater than 85pmol/L [800 pg/mL] that are refractory to standard therapy, and an adjusted serum calcium level at upper limit of normal or high, despite appropriate adjustment of phosphate binders including non-calcium based phosphate binders. ii) in whom surgical parathyroidectomy is contraindicated in that the risks of surgery are considered to outweigh the benefits, or if there is likely to be a significant delay for surgery.	The starting dose for adults is 25mg once daily to be administered orally. Depending on the serum parathyroid hormone (PTH) and calcium levels, the dose may be adjusted within a range of 25-75mg once daily. If no improvement in PTH, the dose may be increased up to 100 mg once daily. Dose can be increased by 25mg at a time at intervals of at least 3 weeks.
Magnesium Sulphate 50 % Injection	LP/ LAMP Q SS	C	**MgSO4**	i) Treatment and prophylaxis of acute hypomagnesaemia ii) Prevention and treatment of life-threatening seizures in the treatment of toxemias of pregnancy (pre-eclampsia and eclampsia).	i) Mild hypomagnesemia (ADULT): 1 gm magnesium sulphate (8 mEq) IM every 6 hours for 4 doses. Severe hypomagnesemia (ADULT): 0.25 g/kg IM over 4 hours. Alternative dose of 5 g may be given by slow intravenous infusion over 3 hours ii) Toxemia of pregnancy: An initial intravenous dose of 4 gm of magnesium sulphate is recommended. Followed by an intramuscular dose of 4- 5 gm into each buttock. This may be followed by a dose of 4-5 gm into alternate buttocks every 4 hours as needed. Alternatively, the initial dose IV dose may be followed by an infusion of 1-2 gm/hr.
Magnesium Sulphate 2.5 g Powder (10 mmol)	LP/SH FP KT	GALENICAL PRODUCT		For treatment of hypomagnesaemia.	Treatment depends on severity and clinical status.
Potassium Dihydrogen Phosphate Injection	APPL SS	A	**KH2PO4**	For treatment of hypophosphataemia.	Up to 10 mmol phosphate administered over 12 hours.
Sevelamer 800 mg Tablet	LP/KKM FPL KT *Nephro	A*		Control of hyperphosphatemia in adult patients receiving haemodialysis and peritoneal dialysis. Prescribtion Restriction: Sevelamer carbonate 800mg tablet should be used in context of multiple therapeutic approach which include calcium supplement, 1, 25-hydroxy Vitamin D3 or one of its analogues to control the development of renal bone disease.	Starting dose is one or two 800 mg tablets three times per day with meals. Adjust by one tablet per meal in two weeks interval as needed to obtain serum phosphorus target (1.13 to 1.78 mmol/L).
Sodium Dihydrogen Phosphate Powder (4 mmol, 8 mmol, 10mmol)	LP/SH FP KT	GALENICAL PRODUCT	NaH2PO4	Hypophosphatemia (including rickets and osteomalacia) Hyponatraemia – oral supplement when the phosphate is also low, the ALP is elevated and HMF is contraindicated.	Oral replacement: Maximum dose daily not to exceed 2 mmol/kg.
Sucroferric Oxyhydroxide 500 mg Chewable Tablet	LP/SH FPL KT **(Named-Patient Basis)	UKK	Velphoro	Chronic kidney disease - mineral bone disease (hyperphosphatemia)	500mg TDS

14.4 VITAMINS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Alfacalcidol 0.25 mcg Capsule	APPL SS	A/KK		i) Chronic kidney disease mineral bone disorder ii) Osteoporosis iii) Hypoparathyroidism and pseudohypoparathyroidism iv) Rickets and osteomalacia	Initial dose ADULT and CHILD above 20 kg body weight : 1 mcg daily; CHILD under 20 kg body weight : 0.05 mcg/kg/day. Maintenance dose : 0.25 mcg to 2 mcg daily. Dosing is individualised based on serum calcium level and according to product insert/protocol
Alfacalcidol 1 mcg Capsule	LP/SH FPL KT	A/KK		i) Chronic kidney disease mineral bone disorder ii) Osteoporosis iii) Hypoparathyroidism and pseudohypoparathyroidism iv) Rickets and osteomalacia	Initial dose ADULT and CHILD above 20 kg body weight : 1 mcg daily; CHILD under 20 kg body weight : 0.05 mcg/kg/day. Maintenance dose : 0.25 mcg to 2 mcg daily. Dosing is individualised based on serum calcium level and according to product insert/protocol
Alfacalcidol 2 mcg/ml Injection	LP/SH FPD KT	A*		i) Chronic kidney disease mineral bone disorder ii) Osteoporosis iii) Hypoparathyroidism and pseudohypoparathyroidism iv) Rickets and osteomalacia	Initial dose ADULT and CHILD above 20 kg body weight : 1 mcg daily; CHILD under 20 kg body weight : 0.05 mcg/kg/day. Maintenance dose : 0.25 mcg to 2 mcg daily. Dosing is individualised based on serum calcium level and according to product insert/protocol

Alfacalcidol 2 mcg/ml Drops	LP/SH FPL KT	A*		i) Neonatal hypocalcemia ii) Osteoporosis iii) Hypoparathyroidism and pseudohypoparathyroidism iv) Rickets and osteomalacia	NEONATES : 0.1 mcg/kg/day. Dosing is individualised based on serum calcium level and according to product insert/protocol
Ascorbic Acid 100 mg Tablet	APPL SS	C+	**Vitamin C**	Vitamin C deficiency.	ADULT: 100-250 mg once or twice daily CHILD: 100 mg three times daily for one week followed by 100 mg daily until symptoms abate.
Calcitriol 0.25 mcg Capsule	APPL SS	A/KK		i) Osteoporosis ii) Chronic kidney disease-mineral bone disorder iii) Hypoparathyroidism and pseudohypoparathyroidism iv) Rickets and osteomalacia	i) 0.25 mcg 2 times daily ii) ADULT and CHILD 3 years and older: Initial dose: 0.25 mcg. In patients with normal or only slightly reduced serum calcium levels, doses of 0.25 mcg every other day is sufficient. Dosage may be increased if necessary to 0.5 mcg/day. Maintenance dose: 0.5-1mcg daily CHILD less than 3 years: 10 to 15 ng/kg/day iii) and iv) 0.25 mcg/day given in the morning
Cyanocobalamin 1 mg Injection	APPL SS	B		i) Prophylaxis of anaemia associated with Vitamin B12 deficiency ii) Uncomplicated pernicious anaemia or Vitamin B12 malabsorption.	i) Prophylaxis of anaemia: 250-1000 mcg IM every month ii) Uncomplicated pernicious anaemia or Vitamin B12 malabsorption: Initial 100 mcg daily for 5-10 days followed by 100-200 mcg monthly until complete remission is achieved. Maintenance: up to 1000 mcg monthly. CHILD 30-50 mcg daily for 2 or more weeks (to a total dose of 1-5mg). OR AS PRESCRIBED.
Multivitamin Drops	LP/KKM FPD KT *Paediatric (Preterm neonate - inpatient)	B	**Appeton Infant Drops**	For prevention and treatment of vitamin deficiencies.	INFANT less than 1 year: 1 ml daily.
Multivitamin Syrup	LP/SH SS	C+		For prevention and treatment of vitamin deficiencies.	CHILD 5 ml daily or based on manufacturer.
Pyridoxine HCl 10 mg Tablet	LP/SH FPL KT	C+		i) Pyridoxine - dependent convulsions in infant. ii) Sideroblastic anaemia. iii) B6-deficient anaemia in adult. iv) Prophylaxis to peripheral neuritis in isoniazid therapy v) Nausea & vomiting of pregnancy & irradiation sickness.	i) INFANT 4 mg/kg daily for short periods ii) 100 - 400 mg daily in divided doses iii) ADULT 20 - 50 mg up to 3 times daily iv) Prophylaxis 10 mg daily, therapeutic 50 mg 3 times daily v) 20 - 100 mg daily.
Thiamine HCl 100 mg/ml Injection	LP/SH FPD KT *Medical *Anaes	B		i) For the prevention or treatment of Vitamin B1 deficiency syndromes including beri-beri and peripheral neuritis associated with pellagra ii) Wernicke-Korsakoff Syndrome.	i) Mild to chronic deficiency: 10 - 25 mg daily. Severe deficiency: 200 - 300 mg daily ii) 500 mg every 8 hours for 2 days, followed by 100 mg bd daily until patient can take oral dose.
Thiamine Mononitrate 10 mg Tablet	APPL FPL KT	C		Prevention and treatment of thiamine deficiency state	Mild chronic deficiency: 5mg to 30mg daily Severe deficiency: up to 300mg daily
Vitamin B Complex Tablet	APPL SS	C+	**Vitamin B CO**	Prophylaxis and treatment of vitamin B deficiency.	1-2 tablets daily.
Vitamin B1, B6, B12 Tablet	LP/KKM SS	B	Neurobion	For deficiency or raised requirement of Vitamin B1, B6, B12.	1 - 3 tablets 3 times daily swallowed unchewed.
Vitamin K1 1 mg/ml Injection	APPL SS	C+		Vitamin K deficiency in neonates.	Prophylaxis of vitamin K deficiency bleeding in neonates CHILD: Neonate: 0.5-1 mg, given as a single dose via IM inj. Alternatively, 2 mg may be given orally, followed by a 2nd dose of 2 mg after 4-7 days. Intravenous Vitamin K deficiency bleeding in neonates Child: Infant: 1 mg by IV/IM/SC inj, further doses may be given if necessary.
Vitamin K1 10 mg/ml Injection	APPL SS	B		Haemorrhage associated with hypoprothrombinaemia caused by overdose of anticoagulants.	0.5 - 20 mg slow IV, at a rate not exceeding 1 mg per minute.

14.5 MISCELLANEOUS NUTRITION AND BLOOD DISORDER

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE

Deferasirox 90 mg film coated tablet	APPL FPL KT *Paediatric	A*		Treatment of chronic iron overload due to blood transfusions (transfusional haemosiderosis) in adult and paediatric patients aged 2 years and above.	• Recommended initial dose is 14mg/kg body weight. • An initial dose of 21mg/kg may be considered for patients receiving more than 14ml/kg/month of packed red blood cells, and for whom the objective is maintenance of the body iron level. • An initial dose of 7mg/kg may be considered for patients receiving less than 7ml/kg/month of packed red blood cells, and for whom the objective is maintenance of the body iron level. • For patients already well-managed on treatment with Deferoxamine, a starting dose of Deferasirox film- coated tablets that is numerically one third of the Deferoxamine dose could be considered. In patients not adequately controlled with doses of 21mg/kg (e.g. serum ferritin levels persistently above 2,500 mcg/L and not showing a decreasing trend over time), doses of up to 28mg/kg may be considered. Doses above 28 mg/kg are not recommended because there is only limited experience with doses above this level.
Deferasirox 360 mg film coated tablet	LP/KKM FPL KT *Paediatric	A*		Treatment of chronic iron overload due to blood transfusions (transfusional haemosiderosis) in adult and paediatric patients aged 2 years and above.	• Recommended initial dose is 14mg/kg body weight. • An initial dose of 21mg/kg may be considered for patients receiving more than 14ml/kg/month of packed red blood cells, and for whom the objective is maintenance of the body iron level. • An initial dose of 7mg/kg may be considered for patients receiving less than 7ml/kg/month of packed red blood cells, and for whom the objective is maintenance of the body iron level. • For patients already well-managed on treatment with Deferoxamine, a starting dose of Deferasirox film- coated tablets that is numerically one third of the Deferoxamine dose could be considered. In patients not adequately controlled with doses of 21mg/kg (e.g. serum ferritin levels persistently above 2,500 mcg/L and not showing a decreasing trend over time), doses of up to 28mg/kg may be considered. Doses above 28 mg/kg are not recommended because there is only limited experience with doses above this level.
Deferiprone 500 mg Tablet	LP/KKM FPL KT	A*		Treatment of iron overload in patients with thalassemia major for whom desferrioxamine therapy is contraindicated or inadequate. Add on therapy to desferrioxamine for thalassemia patients with cardiac complication.	25 mg/kg 3 times a day for total daily dose of 75 mg/kg. Doses greater 100 mg/kg are not recommended.
Desferrioxamine B Methanesulphonate 0.5 g Injection	APPL FPL KT	A	Desferal	i) Acute iron poisoning in children ii) Investigation & treatment of haemochromatosis, iii) Diagnosis and treatment of aluminium toxicity in patients with renal failure and dialysis iv) Chronic iron toxicity/ overload.	i) 2 g by IM immediately and 5 g by mouth after gastric lavage ii) 0.5 - 1.5 g by IM inj daily iii) Diagnosis: 5 mg per kg by slow intravenous infusion during the last hour of haemodialysis. Treatment: 5 mg per kg once a week by slow intravenous infusion during the last hour of dialysis iv) 30-50 mg/kg.
Erythropoietin Human Recombinant 2000 IU Injection	LP/KKM SS	A		i) Treatment of anaemia associated with chronic renal failure. Dialysis patients who have haemoglobin less than 10 g/dL or are exhibiting symptoms of anaemia although haemoglobin more than 10 g/dL and pre-transplant cases ii) Anaemia in cancer (non-myeloid malignancies) with concomitant chemotherapy	a) EPO Alfa: 150IU/kg three times weekly or 40,000IU once weekly b) EPO Beta: 450IU/kg once weekly or 30,000 IU once weekly Dosing is according to product insert.
Erythropoietin Human Recombinant 4000 IU Injection	LP/KKM SS	A		i) Treatment of anaemia associated with chronic renal failure. Dialysis patients who have haemoglobin less than 10 g/dL or are exhibiting symptoms of anaemia although haemoglobin more than 10 g/dL and pre-transplant cases ii) Anaemia in cancer (non-myeloid malignancies) with concomitant chemotherapy	a) EPO Alfa: 150IU/kg three times weekly or 40,000IU once weekly b) EPO Beta: 450IU/kg once weekly or 30,000 IU once weekly Dosing is according to product insert.

Iron (III) Polymaltose Complex 10mg iron/ml syrup	LP/SH FP KT	C	**Maltofer**	Treatment of latent iron deficiency and iron deficiency anaemia (manifest iron deficiency).	Infants (up to 1 year): 2.5-5ml daily (25-50mg iron) Children (1-12 years old): 5-10ml daily (50-100mg iron) Children (>12 years), adults: 10-30 ml daily (100-300mg iron) Pregnant woman 20-30ml daily (200-300mg iron)
Ferric derisomaltose 100 mg/ml solution for injection /infusion	LP/SH FPD KT *Nephro	A*		Indicated for the treatment of iron deficiency in the following conditions: - when oral iron preparations are ineffective or cannot be used - where there is a clinical need to deliver iron rapidly The diagnosis must be based on laboratory tests. Prescribtion Restriction: For cases where less number of administration and fewer medical visits or quick achievement of Hb target are imperative / crucial	Intravenous bolus injection: Up to 500 mg up to three times a week at an administration rate of up to 250 mg iron/minute. Intravenous drip infusion: Up to 20 mg iron/kg body weight or as weekly infusions until the cumulative iron dose has been administered. If the cumulative iron dose exceeds 20 mg iron/kg body weight, the dose must be split in two administrations with an interval of at least one week.
Ferrous Fumarate 200 mg Tablet	APPL SS	C+	**Fe Fumarate**	Prevention and treatment of iron deficiency anaemias.	ADULT: Usual dose range: Up to 600 mg daily. May increase up to 1.2 g daily if necessary. CHILD: As syrup containing 140 mg (45 mg iron)/5 ml. PRETERM NEONATE: 0.6-2.4 ml/kg daily; up to 6 years old: 2.5-5 ml twice daily.
Ferrous iron (elemental iron ≥ 100mg), vitamin & mineral Capsule	LP/KKM SS	B	Zincofer	i) Iron deficiency anaemia ii) Nutritional deficiency anaemia and anaemia associated with pregnancy, worm infestation etc. iii) Prophylaxis against iron deficiency and megaloblastic anaemia of pregnancy during the second and third trimester of pregnancy	1 capsule daily
Ferrous controlled release 525 mg, Vitamin B1, Vitamin B2, Vitamin B6, Vitamin B12, Vitamin C, Niacinamide, Calcium Pantothenate, Folic Acid 800 mcg Tablet	LP/KKM FPL KT *O&G	A/KK	Iberet Folic	Anemia due to iron deficiency, megaloblastic anemia where there is an associated deficiency of Vitamin C and Vitamin B-complex particularly in pregnancy. In primary health clinic, the indication is restricted to anemia due to iron deficiency in pregnant women ONLY.	One tablet daily
Folic Acid 5 mg Tablet	APPL SS	C+		i) For the prevention and treatment of folate deficiency states ii) For the prevention of neural tube defect in the foetus.	i) ADULT initially 10-20 mg daily for 14 days or until haematopoietic response obtained. Daily maintenance: 2.5 mg- 10 mg. CHILD up to 1 year: 250 mcg/kg daily; 1 to 5 years: 2.5 mg/day; 6-12 years: 5 mg/day ii) 5 mg daily starting before pregnancy and continued through the first trimester.
Iron Dextran 50 mg Fe/ml Injection	APPL SS	B	Cosmofer	Severe iron deficiency anaemia.	An initial test dose of 0.5 ml should be given over the desired route. For severe iron deficiency anaemia, 1-2 ml daily given by deep IM. Dosage is individualized according to total iron deficit.
Iron (III) Hydroxide Sucrose Complex 20 mg/ml Solution for Injection	LP/SH FPD KT *O&G *Nephro	B	Venofer	Treatment of iron deficiency anaemia: a) where there is a clinical need for rapid iron supply b) in patients who cannot tolerate oral iron therapy or who are non-compliant c) in active inflammatory bowel disease where oral iron preparations are ineffective.	Individualised dosage. ADULT and ELDERLY: Cumulative dose is to be administered in single doses of 100 - 200 mg of iron 2 - 3 times weekly depending on Hb level. By IV drip infusion, slow IV injection or directly into the venous limb of the dialyser. Total cumulative dose: 1000 mg.
Methoxy Polyethylene Glycol-epoetin Beta 100 mcg/0.3 ml Injection in Prefilled Syringe	LP/SH FPD KT *Nephro	A*	Roche	Treatment of anaemia associated with chronic renal failure. Prescribing restriction: Patients who require higher doses of erythropoietin if it is more cost saving to use a long-acting agent instead of short-acting agents.	Non Erythropoiesis Stimulating Agent (ESA)-treated patients : 0.6 mcg/kg, once every two weeks (IV or SC). When the Hb is >11g/dl, administration can be reduced to once monthly using the dose equal to twice the previous two weekly dose. ESA-treated patients : 120-360 mcg once monthly or 60-180 mcg every two weeks.
Methoxy Polyethylene Glycol-epoetin Beta 120 mcg/0.3 ml Injection in Prefilled Syringe	LP/SH FPD KT *Nephro	A*	Roche	Treatment of anaemia associated with chronic renal failure. Prescribing restriction: Patients who require higher doses of erythropoietin if it is more cost saving to use a long-acting agent instead of short-acting agents.	Non Erythropoiesis Stimulating Agent (ESA)-treated patients : 0.6 mcg/kg, once every two weeks (IV or SC). When the Hb is >11g/dl, administration can be reduced to once monthly using the dose equal to twice the previous two weekly dose. ESA-treated patients : 120-360 mcg once monthly or 60-180 mcg every two weeks.
Methoxy Polyethylene Glycol-epoetin Beta 150 mcg/0.3 ml Injection in Prefilled Syringe	LP/SH FPD KT *Nephro	A*	Roche	Treatment of anaemia associated with chronic renal failure. Prescribing restriction: Patients who require higher doses of erythropoietin if it is more cost saving to use a long-acting agent instead of short-acting agents.	Non Erythropoiesis Stimulating Agent (ESA)-treated patients : 0.6 mcg/kg, once every two weeks (IV or SC). When the Hb is >11g/dl, administration can be reduced to once monthly using the dose equal to twice the previous two weekly dose. ESA-treated patients : 120-360 mcg once monthly or 60-180 mcg every two weeks.

15 RHEUMATOLOGY

15.1 ANTIRHEUMATIC

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Celecoxib 200 mg Capsule	LP/KKM SS	A/KK		i) Osteoarthritis ii) Rheumatoid Arthritis iii) Acute pain iv) Ankylosing Spondylitis.	i) ADULTS: 200 mg once daily. May increase to 200 mg bid, if necessary. CHILD not recommended ii) 100mg twice daily, increased if necessary to 200 mg 2 times daily; CHILD not recommended iii) 400mg as a single dose on first day followed by 200mg once daily on subsequent days iv) Initial, 200 mg once daily or 100 mg twice daily; if no effect after 6 weeks, may increase to max. 400 mg daily in 1-2 divided doses. If no response following 2 weeks of treatment with 400 mg/day, consider discontinuation and alternative treatment.
Etoricoxib 120 mg Tablet	LP/SH FPL KT *Ortho (Mr. Kamal) *Ortho (short term) *Acute Pain Service/Anaest	A*		i) Acute and chronic treatment of signs and symptoms of osteoarthritis (OA) and rheumatoid arthritis (RA) ii) Acute gouty arthritis iii) Acute pain.	i) OA: 60 mg once daily. RA: 90 mg once daily ii & iii) Acute gouty arthritis and acute pain: 120 mg once daily (Given the exposure to COX-2 inhibitors, doctors are advised to use the lowest effective dose for the shortest possible duration of treatment).
Etoricoxib 90 mg Tablet	LP/SH SS *Ortho (Mr. Kamal) *Bedah Mulut * Pakar Medical *Pakar SOPD *Acute Pain Service/Anaest	A/KK		i) Acute and chronic treatment of signs and symptoms of osteoarthritis (OA) and rheumatoid arthritis (RA) ii) Acute gouty arthritis iii) Acute pain.	i) OA: 60 mg once daily. RA: 90 mg once daily ii & iii) Acute gouty arthritis and acute pain: 120 mg once daily (Given the exposure to COX-2 inhibitors, doctors are advised to use the lowest effective dose for the shortest possible duration of treatment).
Hydroxychloroquine Sulphate 200 mg Tablet	LP/KKM SS	A	PLAQUENIL	i) SLE and Mixed Connective Tissue Disease for skin, joint and serosa ii) Second line therapy for acute Rheumatoid Arthritis.	i) Initially 400 mg daily in divided dose. Maintenance : 200 - 400 mg daily ii) ADULT 400 - 600 mg daily. Maintenance: 200 - 400 mg daily. CHILD up to 6.5 mg/kg daily (max 400 mg daily).
Meloxicam 7.5 mg Tablet	LP/SH FPL KT	A/KK		Only for patients not responding to other NSAIDs in the treatment of i) Painful osteoarthritis ii) Rheumatoid arthritis.	i) Initially 7.5 mg daily. May be increased to 15 mg daily. ii) Initially 15 mg daily. May be reduced to 7.5 mg daily. Max 15 mg daily. CHILD under 12 years not recommended.
Tocilizumab 162 mg/0.9 ml Solution for Injection in Prefilled Syringe (for Subcutaneous Injection)	LP/SH FPD KT	A*		Indicated for the treatment of moderate to severe active rheumatoid arthritis (RA) in adult patients: i) with inadequate respond or intolerance to conventional disease- modifying antirheumatic drugs (DMARDS) ii) who has failed antitumour necrosis factors (antiTNFs) iii) where TNF is contraindicated (patients with history of pulmonary tuberculosis [PTB]) It also can be used as monotherapy or with combination with methotrexate (MTX) and/ or other DMARDS. *Off-label use: COVID-19, hospitalized patients.*	Adult patients: 162 mg given once every week as a subcutaneous injection.

15.2 MEDICINES FOR GOUT

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Allopurinol 300 mg Tablet	APPL FP KT	A/KK		i) Frequent and disabling attacks of gouty arthritis (2 or more flares/year) ii) Clinical or radiographic signs of erosive gouty arthritis. iii) The presence of tophaceous deposits iv) Urate nephropathy v) Urate nephrolithiasis vi) Impending cytotoxic chemotherapy or radiotherapy for lymphoma or leukaemia	Initial dose : 100-300 mg daily. Maintenance : 300-600 mg daily. Maximum: 900 mg daily.

Colchicine 0.5 mg Tablet	LP/SH FPL KT	B		i) Acute gout and prophylaxis of recurrent gout ii) Leucocytoclastic Vasculitis either cutaneous or systemic involvement, Behcet's syndrome, Urticarial vasculitis, Systemic sclerosis, Sweet's syndrome and severe recalcitrant aphthous stomatitis.	i) Acute gout: Initial dose, 1 mg, then 0.5 mg after 1 hour. No further tablets should be taken for 12 hours. After 12 hours, treatment can resume if necessary with a maximum dose of 500 micrograms (1 tablet) every 8 hours until symptoms are relieved. The course of treatment should end when symptoms are relieved or when a total of 6 mg (12 tablets) has been taken. No more than 6 mg (12 tablets) should be taken as a course of treatment. After completion of a course, another course should not be started for at least 3 days (72 hours). Prophylaxis of recurrent gout: 0.5 mg bd ii) 0.5 mg 1-3 times daily depends on disease and severity, up to a maximum of 3 mg/day
Febuxostat 80 mg tablet	LP/SH FPL KT *Medical (Dr. Hidayah)	A/KK		Treatment of chronic hyperuricaemia in adult patients, in conditions where urate deposition has already occurred (including a history, or presence of, tophus and/or gouty arthritis). Prescribing Restrictions: i) As second line for patients who are allergic or intolerant to allopurinol, or ii) Fail to achieve serum uric acid target despite dose escalation and good compliance to allopurinol	The recommended starting dose is 40 mg once daily. The recommended oral dose is 40 mg or 80 mg once daily. If serum uric acid is > 6.0 mg/dL (357 µmol/L) after 2-4 weeks, 80 mg once daily may be considered.

15.3 MEDICINES USED IN NEUROMUSCULAR DISORDERS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Eperisone HCl 50 mg Tablet	LP/KKM SS *Ortho	A		Myotonic symptoms associated with cervical syndrome, periarthritis of shoulder and lumbago spastic paralysis.	50 mg 3 times daily.

15.4 MEDICINES FOR THE RELIEF OF SOFT-TISSUE INFLAMMATION

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Prolase Tablet	APPL SS	B		Oedema and inflammation in conjunction with other physical or chemotherapeutic measures.	2 tablet 4 times daily for the first day, then 1 tablet 4 times daily for at least 5 days.

16 OPHTHALMOLOGY

16.1 ANTI-INFECTIVE EYE PREPARATIONS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Ceftazidime 5% Eye Drops	LP/SH FP KT	GALENICAL PRODUCT *Ophthal		Bacterial keratitis.	1 drop hourly or 2 hourly.
Chloramphenicol 0.5% Eye Drops	LP/KKM SS	C	**CMC**	Ophthalmic infections	Instill 1 drop of a 0.5% solution every 2 hr. Increase dosage interval upon improvement.
Chloramphenicol 1% Eye Ointment	APPL SS	C	**CMC**	Treatment of ocular infections involving the conjunctiva and/or cornea caused by chloramphenicol susceptible organisms.	ADULT and CHILD : Apply to the conjunctiva, a thin strip (approximately 1 cm) of ointment every 3 hours or more frequently.
Ciprofloxacin HCl 0.3% Ophthalmic Solution	LP/SH FPL KT *Ophthal	A*		Treatment of bacterial infections caused by susceptible strains in i) corneal ulcers ii) bacterial conjunctivitis.	i) 2 drops every 15 minutes for the first 6 hours, then 2 drops every 30 minutes for the rest of the first day. Second day : 2 drops every hour. Subsequent days (3rd - 14th day) : 2 drops every 4 hours. Treatment may be continued after 14 days if corneal re-epithelialization has not occured ii) 1 - 2 drops every 2 hours into the conjunctival sac while awake for 2 days and 1-2 drops every 4 hours while awake for the next 5 days.
Fusidic Acid 1% Eye Drops	LP/SH FPL KT *Ophthal	A		Bacterial eye infections caused by susceptible organisms	1 drop in conjunctival sac 12 hourly. To be continued for 2 days after the eye appears normal. On the first day of treatment, may be applied more frequently : 1 drop 4 hourly. Surgical prophylaxis : 1 drop every 12 hours, 24 - 48 hours before operation.

Gentamicin 0.3% Eye Drops	LP/SH FPL KT *Ophthal	A/KK		Bacterial eye infections caused by susceptible organisms	1 drops every 4 hours, in severe infection dosage may be increased up to 1 drops every hour. Dosing is individualised and according to product insert/protocol
Gentamicin 0.9% Eye Drops	LP/SH FP KT	GALENICAL PRODUCT *Ophthal		Bacterial keratitis.	1 drop hourly or 2 hourly.
Levofloxacin 0.5% Ophthalmic Solution	LP/SH FPL KT *Ophthal	A*		For the treatment of bacterial conjunctivitis caused by susceptible strains of the designated microorganisms.	Adult dose: 1 drop a time 3 times daily. The dosage may be adjusted according to the patient's symptoms. Route of administration: ophthalmic use only.
Moxifloxacin 0.5% Ophthalmic Solution	LP/SH FPL KT *Ophthal	A*		Treatment of conjunctivitis caused by susceptible organism	CHILD more than 1 year and ADULT: 1 drop to affected eye(s) 3 times daily for 7 days
Vancomycin 5% Eye Drops	LP/SH FP KT	GALENICAL PRODUCT *Ophthal (on request)		Bacterial keratitis.	1 drop hourly or 2 hourly.

16.2 ANTI-INFECTIVE WITH STEROIDS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Prednisolone Acetate 1% Opthalmic Suspension	LP/SH FPL KT *Ophthal	A	Allergan	For steroid responsive inflammation of the palpebral and bulbar conjunctiva, cornea and anterior segment of the globe.	1 to 2 drops to be instilled into the conjunctival sac 2 to 4 times daily. During the initial 24 to 48 hours the dosage may be safely increased to 2 drops every hour. Care should be taken not to discontinue therapy prematurely.

16.3 CORTICOSTEROIDS AND OTHER INFLAMMATORY PREPARATIONS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Dexamethasone Sodium Phosphate 0.1% Eye Drops	LP/SH SS *Ophthal	A	Maxidex	Acute steroid responsive inflammatory and allergic conditions	Instil 1 drop 4-6 times daily. Severe conditions: Instil 1 drop hourly, then reduced to 1 drop 4 hourly as the inflammation subsides.
Fluorometholone 0.1% Ophthalmic Suspension	LP/SH FPL KT *Ophthal	A*	FML Liquifilm, Flarex	Treatment of steroid responsive ocular inflammation.	1-2 drops 2 to 4 times daily. During the initial 24-48 hr, dose may be increased to 2 drops 2 hourly.

16.4 ANTIVIRAL EYE PREPARATIONS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Acyclovir 3% Eye Ointment	LP/SH FPL KT *Ophthal	A*		Only for the treatment of herpes simplex keratitis.	Apply 1 cm 5 times daily. Continue for at least 3 days after healing.

16.5 ANTIFUNGAL EYE PREPARATIONS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Amphotericin B 0.15% Eye Drops	GALENICAL PRODUCT *Ophthal	A		Fungal infection of the cornea.	1 drop hourly or 2 hourly.
Fluconazole 0.2% Eye Drops	GALENICAL PRODUCT *Ophthal			Fungal keratitis.	1 drop hourly or 2 hourly.
Natamycin 5% Eye Suspension	LP/SH FPL KT *Ophthal	UKK		Specific fungal ulcer	1 drop hourly or 2 hourly.

16.6 MYDRIATICS AND CYCLOPLEGICS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE

Atropine Sulphate 1% Eye Drops	LP/SH FPL KT *Ophthal	B		Determination of refraction, strabismus, iritis and iridocyclitis, after extra or intracapsular extraction of lens.	Use in adults - For uveitis: 1 drop in the eye(s), 3 times daily. - For refraction: 1 drop in the eye(s), repeated 1 hour before the examination
Cyclopentolate 0.2% with Phenylephrine 1% Eye Drops	LP/SH FPD KT *Ophthal	A		Dilating agent for premature babies.	1 drop every 5 - 10 minutes; not exceeding three times to produce rapid mydriasis. Observe infants closely for at least 30 minutes.
Cyclopentolate 1% Eye Drops	LP/SH FPD KT *Ophthal	A/KK		Mydriasis & cycloplegia.	ADULT : 1 drop of solution in eye(s); may repeat after 5-10 minutes if needed. CHILD : 1 drop of solution in eye(s); may repeat after 5-10 minutes if needed. Pre-treatment on the day prior to examination is usually not necessary. If desirable, 1 or 2 drops may be instilled the evening prior to examination.
Olopatadine Hydrochloride Ophthalmic Solution 0.2%	LP/SH FPL KT *Ophthal	A*		Treatment and prevention of ocular itchiness in allergic conjunctivitis	One drop in each affected eye once a day.
Phenylephrine HCl 2.5% Eye Drops	LP/SH FPD KT *Ophthal	B		For pupillary dilation in uveitis, for refraction without cyclopegic. For fundoscopy and other diagnostic procedures.	Mydriasis and vasoconstriction: 1 drop of 2.5% or 10% solution, repeated in one hour if necessary. Chronic mydriasis: 1 drop of a 2.5% or 10% solution 2 - 3 times a day. Uveitis with posterior synechiae (treatment) or synechiae, posterior (prophylaxis): 1 drop of a 2.5% or 10% solution, repeated in one hour if necessary, not to exceed three times a day. Treatment may be continued the following day, if necessary.
Tropicamide 1% Eye Drops	LP/SH FPD KT *Ophthal	A/KK		Topical use to produce cycloplegic refraction for diagnostic purposes	1 - 2 drops several times a day

16.7 TREATMENT OF GLAUCOMA

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Acetazolamide 250 mg Tablet	APPL SS	B		Reduction of intraocular pressure in open-angle glaucoma, secondary glaucoma and peri-operatively in angle-closure glaucoma.	250 mg 1-4 times a day, the dosage being titrated according to patient response.
Bimatoprost 0.01% Ophthalmic Solution	LP/SH FPL KT *Ophthal	A*		Reduction of elevated intraocular pressure in chronic openangle glaucoma and ocular hypertension in adults (as monotherapy or as adjunctive therapy to beta blockers). (for 2nd line)	One drop in the affected eye(s) once daily, administered in the evening. The dose should not exceed once daily, as more frequent administration may lessen the intraocular pressure lowering effect.
Brimonidine Tartrate 0.15% Ophthalmic	LP/KKM SS *Ophthal	A*		Lowering of intraocular pressure in patients with open-angle glaucoma or ocular hypertension.	1 drop in the affected eye(s) 3 times daily.
Brinzolamide 1% and Brimonidine Tartrate 0.2% Ophthalmic Suspension	LP/SH FPL KT *Ophthal	A*	Simbrinza	Decrease of elevated intraocular pressure (IOP) in adult patients with open-angle glaucoma or ocular hypertension for whom monotherapy provides insufficient IOP reduction.	1 drop in the affected eye(s) 2 times daily.
Dorzolamide HCl 2% Ophthalmic Solution	LP/KKM SS *Ophthal	A*		All glaucoma patients where beta-blockers are contraindicated and when intraocular pressure is not well controlled by other drugs.	Monotherapy: 1 drop tds. Adjunctive therapy with an ophthalmic beta-blocker: 1 drop bd. When substituting for another ophthalmic antiglaucoma agent with this product, discontinue the other agent after proper dosing on one day & start Trusopt on the next day. If more than 1 topical ophthalmic drug is used, the drugs should be administered at least 10 mins apart.
Glycerol 50% Oral Solution	GALENICAL PRODUCT *Ophthal (on request)			i) for short-term reduction of vitreous volume and intra-ocular pressure before and after opthalmic surgery ii) as an adjunct in the management of acute glaucoma.	ADULTS: 1 to 2 g/kg P.O. 60 to 90 minutes preoperatively. Glycerin may be administered more than once daily, if required. The total daily dose of glycerin should not exceed 120 grams.
Latanoprost 0.005% Eye Drops	LP/LAMP Q SS *Ophthal	A*		Reduction of elevated intraocular pressure in patients with open-angle glaucoma.	1 drop in the affected eye(s) once daily

Pilocarpine 2% Eye Drops	LP/SH FPD KT *Ophthal	B		Miotics in chronic open-angle glaucoma.	1 drop 1 - 4 times a day.
Timolol 0.5% Eye Drops	APPL SS *Ophthal	A		Elevated intraocular pressure, chronic open angle glaucoma.	1 drop for once daily or 2 times daily depending on manufacturer's recommendation.
Timolol 0.5% Eye Drops (Preservative Free)	LP/SH FPL KT *Ophthal	A	Timo-Comod	Elevated intraocular pressure, chronic open angle glaucoma.	1 drop for once daily or 2 times daily depending on manufacturer's recommendation.

16.8 LOCAL ANAESTHETICS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Proparacaine HCL 0.5% Ophthalmic Drops	LP/SH FPD KT	B		Topical anaesthesia in ophthalmic procedures.	Deep anaesthesia: 1 or 2 drops in the (eyes) every 5 to 10 minutes for 3 to 5 doses. For minor surgical procedures: instill 1 to 2 drops every 5 to 10 minutes for 1 to 3 doses. Tonometry and/or tonography procedure: 1 to 2 drops in each eye before procedure.

16.9 MISCELLANEOUS OPHTHALMOLOGY

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Artificial Tears/ Eye Lubricant Ophthalmic Solution	LP/KKM SS	B		Tear deficiency, ophthalmic lubricant; for relief of dry eyes and eye irritation.	1 - 2 drops several times a day. Refer to product information leaflet.
Artificial Tears/ Eye Lubricant Ophthalmic Gel	LP/SH FPD KT *Ophthal	B	Siccapos	Symptomatic relief of severe dry eye conditions and as lens lubricant during ophthalmic diagnostic procedures.	Instill 1-2 drops in affected eye(s) as needed. Refer to product information leaflet.
Carbachol 0.01% Intraocular Solution	LP/SH *Ophthal	A		For intraocular use for miosis during surgery.	Instill no more than 0.5 ml gently into the anterior chamber.
Ciclosporin 50 mg/ml Injection (for preparation of Ciclosporin Ophthalmic Emulsion)	LP/SH FPL KT *Ophthal (Name-Patient basis)	A*		To increase tear production in patients whose tear production is presumed to be suppressed due to ocular inflammation associated with keratoconjunctivitis sicca. Increased tear production was not seen in patients currently taking anti inflammatory drugs or using punctal plugs.	1 drop twice a day in each eye approximately 12 hours apart.
Sodium Chloride 0.9% Eye Drops	LP/SH SS	C	**NaCl**	Irrigation of conjunctival sac.	1 -2 drops every 3-4 hours.
Sodium Chloride 3% Eye Drops (Hypertonic Saline)	GALENICAL PRODUCT			Corneal edema.	1 -2 drops every 3-4 hours.
Sodium Cromoglycate 2% Eye Drops	LP/SH FPL KT	A/KK		Prevention & treatment of allergic conjunctivitis including seasonal & perennial allergic conjunctivitis & vernal keratoconjunctivitis.	1 or 2 drops 4 times daily.
Sodium Cromoglycate 2% Eye Drops (Preservative Free)	LP/SH FPL KT	A/KK	Allergo-Comod	Prevention & treatment of allergic conjunctivitis including seasonal & perennial allergic conjunctivitis & vernal keratoconjunctivitis.	1 or 2 drops 4 times daily.
Sodium Hyaluronate 0.2% Ophthalmic Gel	LP/SH FPL KT	MDA	(HYLO-GEL)	Severe or chronic forms of dry eye, postoperative	1 drop 2-6 hourly depending on severity.

17 EAR, NOSE AND OROPHARYNX

17.1 EAR PREPARATIONS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Chloramphenicol 5% w/v Ear Drops	APPL SS	C	**CMC**	Acute otitis media, otitis externa with perforation.	Apply 2 - 3 drops into the ear bd - tds. Not to be used for long term.
Clotrimazole 1% Ear Drop	LP/SH FPL KT *ENT	B		Otomycosis; concomitant therapy with antibiotics and corticosteroid ear drops.	4 to 5 drops 3 to 4 times daily.
Ear Wax Softener	LP/SH FPD KT *ENT (Floor Stock)	B	Nur Care (Mineral oil, Phytosqualan, Spearmint oil)	Occlusion or partial occlusion of the external auditory meatus by soft wax or wax plug	Instill 5 drops into the ears. Refer product information leaflet
Fluocinolone Acetonide 0.25mg/ml, Ciprofloxacin 3mg/ml Ear Drop Solution	LP/SH FPL KT *ENT	UKK		i) Severe otitis externa ii) Malignant otitis externa	5 drops BD.
Ichthammol Glycerin 10% Ear Drops	LP/SH FPL KT *ENT	GALENICAL PRODUCT		Ear wick for otitis externa with oedema	2 - 3 drops 3 - 4 times daily and in ear wick for otitis externa

Ofloxacin 0.3% Otic Solution	LP/SH SS *ENT	A/KK		i) Acute otitis media with tympanostomy tubes ii) Chronic suppurative otitis media with perforated tympanic membranes and iii) Otitis externa.	CHILD: 1 - 12 years: 5 drops twice daily for 10 days. ADULT and CHILD over 12 years: 6 - 10 drops twice daily and remain in the ear about 10 minutes.
Polymyxin B Sulphate 10,000 U, Neomycin Sulphate 5 mg and Hydrocortisone 10 mg Ear Drops	APPL FPL KT *ENT	B	**POCIN-H**	Treatment of bacterial infection and inflammation of the external auditory meatus.	3-4 drops 3 – 4 times daily. Dosing is individualised and according to product insert/protocol
Sodium Bicarbonate 5% w/v Ear Drops	GALENICAL PRODUCT	GALENICAL PRODUCT	**NaHCO3**	To soften the impacted ear wax.	2 - 3 drops 3-4 times daily.

17.2 NOSE PREPARATIONS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Budesonide 64 mcg Nasal Spray	LP/SH FPL KT *ENT *Paediatric *Bedah Mulut	A/KK		Seasonal allergic, perennial rhinitis and nasal polyposis.	ADULT and CHILD 6 years and older. Rhinitis : 2 spray into each nostril once daily in the morning or 1 spray into each nostril twice daily. Nasal polyps : 2 spray twice daily.
Fluticasone Furoate 27.5 mcg/dose Nasal Spray	LP/SH SS *ENT	A*		Treatment of nasal symptoms (rhinorrhea, nasal congestion, nasal itching and sneezing) and ocular symptoms (itching/burning, tearing/watering, and redness of the eye) of seasonal and perennial allergic rhinitis.	Adults/Adolescents (≥12years):1-2 sprays (27.5 mcg/spray) in each nostri lonce daily. Children (2-11years): 1-2 sprays (27.5 mcg/spray) in each nostril once daily.
Mometasone Furoate 50 mcg Aqueous Nasal Spray	LP/KKM SS *ENT *Bedah Mulut	A*		i) Allergic rhinitis. ii) For the treatment of nasal polyps in patients 18 years of age and older.	ALLERGIC RHINITIS: ADULT and CHILD, 12 years and above: 100 mcg/day (2 sprays) to each nostril once daily. Maximum 200 mcg (4 sprays) once daily. Reduce to 50 mcg (1 spray) once daily when control achieved. CHILD 3 - 11 years old: 50 mcg (1 spray) to each nostril once daily. TREATMENT OF NASAL POLYPS: Two sprays (50 micrograms/spray) in each nostril twice daily (total daily dose of 400 mcg). Once symptoms are adequately controlled, dose reduction to two sprays in each nostril once daily (total daily dose 200 mcg) is recommended.
Oxymetazoline HCl 0.025% (Paediatric) Nasal Spray	LP/SH FPL KT *ENT *Bedah Mulut	A		Acute colds, paranasal sinusitis and otitis media.	2 - 3 sprays into each nostril twice daily for child more than 1 year.
Oxymetazoline HCl 0.05% (Adult) Nasal Spray	LP/SH SS *ENT *Bedah Mulut	A		Acute colds, paranasal sinusitis and otitis media.	2 - 3 sprays into each nostril twice daily, maximum 6 sprays per nostril/day.
Sodium Chloride 0.9% Nasal Drops	LP/SH SS	C	**NaCl**	Nasal Congestion	1 -2 drops every 3-4 hours.
Sodium Bicarbonate Powder (Nasal Douche)	GALENICAL PRODUCT		**NaHCO3**	To keep the nose clean, washes out mucus, helps reduce inflammation and infection and therefore can help relieve nasal symptoms.	Take 1 flat teaspoon of powder and mix with 250ml of cool, boiled water. Douche with a syringe.

17.3 OROPHARYNX PREPARATIONS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Benzydamine HCl 0.15% Solution	LP/KKM FPL KT *ENT	B		For relief of painful condition of the oral cavity.	Used as a 30 seconds gargle or rinse, undiluted. ADULT 15 ml. CHILD less 12 years 5-15 ml. Uninterrupted treatment should not be more than 7 days.

Benzydamine Hydrochloride 3.0 mg/ml Throat Spray	LP/SH FPL KT *ENT	A*		Temporary relief of painful conditions of the mouth and throat including tonsillitis, sore throat, radiation mucositis, aphthous ulcers, pharyngitis, swelling, redness, inflammatory conditions, post-orosurgical and periodontal procedures. (For pediatric and otorhinolaringology use. Restrict to patients who are not able to gargle).	ADULTS and CHILDREN OVER 12 YEARS: 2-4 sprays (1-2 mg) directly onto the sore/ inflamed area and swallow gently. Repeat every 1 1/2 to 3 hours as necessary. CHILDREN 6-12 YEARS: 2 sprays (1 mg directly onto sore/ inflamed area and swallow gently. Repeat every 1 1/2 to 3 hours as necessary. CHILDREN UNDER 6 YEARS: Not recommended. Uninterrupted treatment should not exceed 7 days, unless under medical supervision.
Bismuth Subnitrate, Iodoform and Liquid Paraffin Paste	GALENICAL PRODUCT FP KT			As a mild antiseptic for wounds and abscesses. Sterile gauze impregnated with paste for packing cavities after otorhinological surgery.	As directed for local application.
Chlorhexidine Gluconate 0.2% Mouthwash	LP/SH SS	C		As a gargle.	Rinse mouth with 10 ml for about 1 minute twice daily.
Chloroform 30%, Ethanol 60%, Acetic acid 10% Solution	GALENICAL PRODUCT *On request FP KT		Carnoy's Solution	Odontogenic keratocyst.	
Glycerin	LP/SH FP KT	C+		As a lubricant and osmotic dehydrating agent.	Apply to area when required.
Hydrogen Peroxide 1.5% Mouthwash	GALENICAL PRODUCT *OFMS *Surgical			Cleansing minor wounds or minor gum inflammation.	Rinse the mouth for 2-3 minutes. This may be repeated up to three times daily.
Sodium Bicarbonate 2% Mouth Wash	GALENICAL PRODUCT		**NaHCO3**	Cleanses and deodorises.	Use 15 – 30 mL as required. Rinse around the mouth and expel.

17.4 ANTIHISTAMININES, HYPOSENSITISATION AND ALLERGIC EMERGENCIES

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Cetirizine HCl 10 mg Tablet	LP/SH SS *Skin *Paediatric (child < 2yo)	B		Urticaria, allergic dermatoses (insect bites, atopic eczema), perennial rhinitis, allergic rhinitis.	ADULT and CHILD over 6 years:10 mg daily or 5 mg twice daily. Child 2-6 years: 5 mg once daily or 2.5 mg twice daily.
Chlorpheniramine Maleate 10 mg/ml Injection	APPL SS	B		Allergic conditions.	10 - 20 mg IM or SC, repeated if required. Not to exceed 40 mg in 24 hours. 10 - 20 mg over 1 minute by slow IV.
Chlorpheniramine Maleate 2 mg/5 ml Syrup	APPL FP KT	C		Symptomatic treatment of allergic conditions responsive to antihistamine.	CHILD 2 - 5 years : 1 mg every 4 - 6 hours (maximum 6 mg daily) 6 - 12 years : 2 mg every 4 - 6 hours (maximum 12 mg daily).
Chlorpheniramine Maleate 4 mg Tablet	APPL SS	C		Symptomatic treatment of allergic conditions responsive to antihistamine.	ADULT : 4 mg every 4 - 6 hours. Maximum 24 mg daily. CHILD 2 - 5 years : 1 mg every 4 - 6 hours (maximum 6 mg daily) 6 - 12 years : 2 mg every 4 - 6 hours (maximum 12 mg daily).
Loratadine 10 mg Tablet	APPL SS	B		Allergic rhinitis and allergic dermatoses.	ADULT and CHILD over 6 years 10 mg once daily. CHILD 2 - 6 years: 5 mg once daily.
Promethazine HCl 25 mg/ml Injection	APPL SS	B		i) Allergic conditions ii) Treatment and prevention of vomiting including: - motion sickness - drug induced nausea - prevention and control of nausea and vomiting associated with certain types of anaesthesia and surgery	i) Allergic Conditions: Adult and adolescent dose: 25mg intramuscular or intravenous. May be repeated within 2 hours if required. Children 2 years and older: intramuscularly-0.125mg/kg body weight every 4 to 6 hours OR 0,5mg/kg bodyweight at bedtime as needed OR 6.25-12.5mg three times a day as needed OR 25mg at bedtime as needed. ii) Treatment and prevention of vomiting: - Motion Sickness: Adult and adolescent dose: 25mg twice a day as needed. Children: 0.5mg/kg every 12 hours as needed OR 10 - 25mg twice a day as needed. - Anti Emetic Therapy: Adult and adolescent dose: 25mg initially and then 10 -25mg every 4 - 6 hours as needed. Children: 0.25-0.5mg/kg every 4 to 6 hours as needed OR 10 - 25mg every 4 to 6 hours as needed. Dosing is individualised and according to product insert/protocol
Promethazine HCl 5 mg/5 ml Syrup	APPL SS	B		Allergic conditions.	CHILD 2 - 5 years: 5 - 15 mg daily 5 - 10 years : 10 - 25 mg daily.

17.5 MUCOLYTICS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Bromhexine HCl 4 mg/2 ml Injection	LP/SH FPD KT *Anaes *Surgical	A		Secretolytic therapy in acute and chronic bronchopulmonary diseases associated with abnormal mucous secretion and impaired mucous transport.	4mg IM or IV 2 - 3 times daily (maximum 12mg/day)
Bromhexine HCl 4 mg/5 ml Oral Solution	LP/SH SS	B		Secretolytic therapy in acute & chronic bronchopulmonary diseases associated with abnormal mucous secretion & impaired mucous transport.	Adult: 8-16 mg three times daily. Children: By body weight: 0.3 mg/kg/day 8 hourly for 7 days, then 0.15 mg/kg/day 8 hourly; or Based on age: 6-12 years – 4mg three times daily; 2-6 years – 2mg three times daily; Less than 2 years – 1mg three times daily.
Bromhexine HCl 8 mg Tablet	LP/SH SS	C		Secretolytic therapy in acute & chronic bronchopulmonary diseases associated with abnormal mucous secretion & impaired mucous transport. Prescribing Restriction:Medical Assistant in health settings without Medical Officer is allowed to prescribe this medicine for adult use only.	Adult: 8-16 mg three times daily. Children: By body weight: 0.3 mg/kg/day 8 hourly for 7 days, then 0.15 mg/kg/day 8 hourly; or Based on age: 6-12 years – 4 mg three times daily; 2-6 years – 2 mg three times daily

17.6 AROMATIC INHALATIONS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Menthol Crystal	LP/SH FP KT	GALENICAL PRODUCT		Decongestion of the upper respiratory tract.	As directed for local use.

17.7 COUGH PREPARATIONS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Diphenhydramine Hydrochloride 14 mg/5 ml Expectorant	APPL SS	C	**Benadryl**	Cough.	ADULT : 5 - 10 ml 2 - 3 times daily.
Diphenhydramine Hydrochloride 7 mg/5 ml Expectorant	APPL SS	C	**Benadryl Paeds**	Cough.	CHILD 6-12 years: 2.5 to 5 ml 2-3 times daily CHILD 2-5 years: 2.5 ml 2-3 times daily NOT to be used in children less than 2 years in age

17.8 SYSTEMIC NASAL DECONGESTANTS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Loratadine 5 mg & Pseudoephedrine Sulphate 120 mg Tablet	LP/SH FPL KT	A/KK	Clarinase	For treatment of allergic rhinitis and allergic dermatoses.	ADULT and CHILD over 12 years 1 tablet twice daily.
Triprolidine HCl 1.25 mg & Pseudoephedrine HCl 30 mg per 5 ml Syrup	LP/SH FP KT	B	**Actifed**	Decongestion of the upper respiratory tract in common cold, hay fever, allergic and vasomotor rhinitis and sinusitis.	Adult and children over 12 years: 10ml 3 times a day (max 4 times a day) CHILD: 6 - 12 years: 5 ml (6-8 hourly) 2 - 5 years: 2.5 ml (6-8 hourly)
Triprolidine HCl 2.5 mg & Pseudoephedrine HCl 60 mg Tablet	LP/SH FPL KT	B	**Actifed**	Decongestion of the upper respiratory tract in common cold, hay fever, allergic and vasomotor rhinitis and aerotitis.	ADULT 2.5 mg every 4 - 6 hours; maximum dose 10 mg/day. CHILD (syrup) 6 - 12 years : 1.25 mg every 4 - 6 hours; maximum dose 5 mg/day 4 - 6 years : 0.938 mg every 4 - 6 hours; maximum dose 3.744 mg/day 2 - 4 years : 0.625 mg every 4 - 6 hours; maximum dose 2.5 mg/day.

17.9 MISCELLANEOUS EAR, NOSE AND OROPHARYNX

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE

Cinnarizine 25 mg Tablet	APPL SS	B		i) Vestibular disorders ii) Motion sickness.	ADULT and CHILD > 12 years: i) 25mg three times a day ii) 25mg 2 hours before travel and 12.5mg every 8 hours during journey CHILD 5-12 years: Half the adult dose Dosing is according to product insert.

18 DERMATOLOGY

18.1 EMOLLIENT AND BARRIER PREPARATION

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Aqueous Cream	APPL FP KT	C+		As an emollient for dry skin. Can be used as soap substitute for bathing.	As a soap or apply to the skin as an emollient.
Carbamide (Urea) 10 % Cream	LP/SH FPL KT *Surgical	B		Contact irritant dermatitis, infantile eczemas, acute and chronic allergic eczemas, icthyosis, hyperkeratotic	Apply sparingly and rub into affected area 2 - 3 times daily and when required after cleansing skin
Emulsificants Ointment	APPL FP KT	C		As an emollient for the symptomatic relief of dry skin conditions and as soap-substitute for skin-bathing.	Apply to the affected area as required or as in package insert
Paraffin Mole Alba (White Soft Paraffin)	APPL FP KT	C	Vaseline	Xerosis and ichthyosis.	Apply to the affected area.

18.2 TOPICAL LOCAL ANAESTHETICS AND ANTIPRUTITICS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Calamine Lotion	APPL SS	C+		Soothes and relieves nappy rashes, prickly heat, minor skin irritations, insect bites and sunburn, pruritic skin conditions.	Apply to the skin as required and allow to dry, 1-3 times a day.

18.3 TOPICAL CORTICOSTEROIDS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Betamethasone 17 - Valerate 1:8 Cream	APPL FPL KT	B	**BVC**	Topical corticosteroid indicated for the relief of inflammatory and pruritic manifestation of steroid-responsive dermatoses.	Apply sparingly to affected area 2 times daily then reduced to once daily when improvement occurs
Betamethasone 17 - Valerate 1:4 Cream	APPL FP KT	B	**BVC**	Eczema, prurigo nodularis, limited psoriasis in appropriate in sites.	Apply sparingly to affected area bd - tds then reduced to once daily when improvement occurs.
Betamethasone 17 - Valerate 1:4 Ointment	APPL FP KT	B	**BVC**	Eczema, prurigo nodularis, limited psoriasis in appropriate in sites.	Apply sparingly to affected area bd - tds then reduced to once daily when improvement occurs.
Betamethasone 17 - Valerate 0.1% Cream	APPL SS *Skin	A/KK	**BVC**	Potent topical corticosteroid indicated for adults, elderly and child over 1 year for relief of inflammatory and pruritic manifestation of steroid responsive dermatoses.	Apply sparingly to affected area 2 times daily then reduced to once daily when improvement occurs
Clobetasol Propionate 0.05 % Cream	LP/SH FPL KT *Skin	A	Dermovate	Short term treatment only of more resistant dermatoses eg. psoriasis, recalcitrant eczemas, lichen planus, discoid lupus erythematosus and other conditions which do not respond satisfactorily to less potent steroids.	Apply sparingly once or twice daily, changing to lower potency therapy as soon as condition is controlled. For mild to moderate use maximum for 2 weeks. For moderate to severe maximum duration 4 consecutive weeks. Max: 50 g/week.
Clobetasol Propionate 0.05% Ointment	LP/SH FPL KT *Skin	A	Dermovate	Short term treatment only of more resistant dermatoses eg. psoriasis, recalcitrant eczemas, lichen planus, discoid lupus erythematosus and other conditions which do not respond satisfactorily to less potent steroids.	Apply sparingly once or twice daily, changing to lower potency therapy as soon as condition is controlled. For mild to moderate use maximum for 2 weeks. For moderate to severe maximum duration 4 consecutive weeks. Max: 50 g/week.

Clobetasone Butyrate 0.05 % Cream	LP/SH FPL KT *Skin	A/KK	Eumovate	For the relief of the inflammatory and pruritic manifestations of steroid responsive dermatoses.	Apply to 1-2 times a day
Hydrocortisone 1 % Cream	APPL SS	B		Inflammatory and pruritic manifestations of corticosteroid responsive dermatoses.	Apply sparingly to the affected area. Adult: 3-4 times daily. Children: 1-2 times daily
Mometasone Furoate 0.1% Cream	LP/SH SS *Skin	A*		For the relief of the inflammatory and pruritic manifestations of the corticosteroid responsive dermatoses	Apply thin layer to the affected skin areas once daily until the lesion heals or for a duration of 3 weeks whichever is sooner. Massage gently and thoroughly until the medication disappears.

18.4 PREPARATIONS FOR ECZEMA AND PSORIASIS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Calcipotriol 50 mcg/g & Betamethasone Dipropionate 0.5 mg/g Ointment	LP/SH FPL KT *Skin	A*		Resistant plaque psoriasis	Apply once daily up to 4 weeks with maximum weekly dose of 100g and maximum treatment area 30% of body surface
Coal Tar 3% + Salicylic Acid 2% Ointment	LP/SH FP KT *Skin	B		Dandruff, seborrhoeic dermatitis, atopic dermatitis, eczema and psoriasis.	Apply to the affected area as required or as in package insert
Coal Tar 2% Ointment	LP/SH FP KT *Skin	GALENICAL PRODUCT		Dandruff, seborrhoeic dermatitis, atopic dermatitis, eczema and psoriasis. Used as a mild astringent for the skin, as a soothing and protective application in eczema and as a protective to slight excoriation.	Apply sparingly to the affected area 1-3 times daily starting with low strength preparations.
Coal Tar 3% Ointment	LP/SH FP KT *Skin	GALENICAL PRODUCT		Dandruff, seborrhoeic dermatitis, atopic dermatitis, eczema and psoriasis. Used as a mild astringent for the skin, as a soothing and protective application in eczema and as a protective to slight excoriation.	Apply sparingly to the affected area 1-3 times daily starting with low strength preparations.
Cocois Co. Ointment	LP/SH FP KT *Skin	GALENICAL PRODUCT		Scalp psoriasis and severe seborrhoeic dermatitis.	Rub a small amount into the scalp gently.
Hydroxyurea 500 mg Capsule	LP/SH SS	A		i. Solid tumours ii.Chronic myelocytic leukaemia and myeloproliferative disease Nota: 1. Indikasi Severe psoriasis adalah tidak berdaftar dengan PKBD 2. Tidak disarankan dalam garis panduan semasa.	i. Intermittent therapy: 80 mg/kg orally as a single dose every 3rd day. Continuous therapy: 20 - 30 mg/kg orally as a single dose dly. Concomitant therapy with irradiation: 80 mg/kg orally as a single dose every 3rd day (administration of hydroxyurea should be started at least 7 days before initiation of irradiation and continued during radiotherapy as well). ii) Continuous therapy (20 - 30 mg/kg orally as a single dose daily)
Ketoconazole 2% Shampoo	LP/SH FPL KT *Skin	A/KK		Dandruff, seborrhoeic dermatitis and pityriasis versicolor.	Seborrhoeic dermatitis & dandruff: Apply twice weekly for 2 to 4 weeks. Pityriasis versicolor:Apply once daily for up to 5 days. Prophylaxis: Once every 1 or 2 weeks. Both left for 3-5minutes before rinsing.
Pine Tar 1% w/w, Coal Tar 1% w/w and Salicylic Acid 2% w/w	LP/SH FPL KT *Skin	A/KK	**Sebitar Shampoo**	For relief of symptoms of seborrhoeic dermatitis (scaling and falking scalp), eczema and psoriasis of the scalp.	Apply twice weekly up to once daily if required to affected area.
Salicylic Acid 2% Cream	APPL FP KT	C	**SA**	Seborrhoeic dermatitis, scalp psoriasis and hyperkeratotic skin conditions.	Apply sparingly to the affected area bd-tds.
Salicylic Acid 2% Ointment	APPL FP KT	C	**SA**	Seborrhoeic dermatitis, scalp psoriasis and hyperkeratotic skin conditions.	Apply sparingly to the affected area bd-tds.
Zinc Oxide Cream	LP/SH FP KT	C+		Skin protective in various skin conditions such as nappy rash, eczema and problem skin.	Apply tds or as required.

18.5 ACNE AND ROSACEA

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Adapalene 0.1% Gel	LP/SH FPL KT *Skin	A/KK		Treatment for acne vulgaris where comedones, papules and pustules predominate	Apply once daily to the affected areas after washing at bedtime.
Benzoyl Peroxide 5% Gel	LP/SH FPL KT *Skin	B		Mild to moderate acne vulgaris.	Apply 1-2 times daily preferably after washing with soap and water.
Calamine with 2% Precipitated Sulphur Lotion	LP/SH FP KT	GALENICAL PRODUCT *On request		Acne vulgaris.	Apply to the skin as required and allow to dry, 1 - 3 times daily.
Calamine with 4% Precipitated Sulphur Lotion	LP/SH FP KT	GALENICAL PRODUCT *On request		Acne vulgaris.	Apply to the skin as required and allow to dry, 1 - 3 times daily.
Isotretinoin 10 mg Capsule	LP/SH FPL KT *Skin	A*	R.P. Scherer Korea	Only for treatment of i) Severe nodulo-cystic acne ii) Acne conglobata iii) Acne fulminans iv) Severe acne vulgaris failing conventional treatment.	0.5-1 mg/kg of body weight per day (in two divided doses) for 15 to 20 weeks; the maximum recommended dose is 2mg/kg of body weight per day. After about 4 weeks, therefore, dosage for the maintenance treatment should be adjusted within the range 0f 0.1-1mg/kg daily to meet individual need. Treatment usually lasts a total of 16 weeks. There should be an interval of at least 8 weeks before re-starting treatment.
Sulphur 2% & Salicylic Acid 2% Cream	LP/SH FP KT *Skin	C		Acne vulgaris and seborrhoeic dermatitis.	When used in scalp disorders, a small amount of cream should be rubbed gently into the roots of the hair. When used in skin disorders, the cream should be applied sparingly to the affected area. Apply once daily or until noticeable improvement, then once or twice a week.

18.6 PREPARATIONS FOR WARTS AND CALLUSES

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Salicylic Acid 20% Ointment	LP/SH FP KT	C	**SA**	Plantar warts.	Apply daily and protect surrounding skin (eg with soft paraffin or specially designed plaster), may need to continue up to 3 months.

18.7 SUNSCREENS AND CAMOUFLAGERS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Sunscreen SPF 30-50 Cream	LP/SH FPL KT *Skin	B		Photodermatitis.	Apply to exposed areas at least 15 minutes prior to solar exposure; reapply after swimming, prolonged perspiration and after 2 hours of continuos sun exposure

18.8 SHAMPOOS AND OTHER PREPARATIONS FOR SCALP CONDITIONS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Selenium Sulphide 2.5% Shampoo	LP/SH FPL KT *Skin	A/KK	Selsun	Dandruff, seborrheic dermatitis of scalp.	Apply onto wet hair, lather and leave on scalp for 3 minutes. Rinse. Repeat treatment. Rinse thoroughly. Use twice weekly at first, then as necessary as directed by the physician..

18.9 ANTI-INFECTIVE SKIN PREPARATIONS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Benzoic Acid Compound Ointment	APPL FP KT	C	Whitfields	Tinea infections of thickened skin of palms and soles.	Apply sparingly to affected area once or twice daily.
Benzyl Benzoate 25% Emulsion (Adult)	LP/SH SS	C+		Scabies, for adult and children more than 12 years old.	After bath, apply over the whole body, neck down and leave on for 24 hours then wash off. Reapply for another 24 hours, the first repeat application should be within 5 days of the initial application, a third application may be required in some cases.
Clotrimazole 1% Solution	LP/SH FPL KT *Skin	A		For treatment of large lesion of fungal infection (eg: cutaneous candidiasis, tinea orporis, tinea cruris, tinea pedis and tinea versicolor).	Apply on affected area by rubbing for 2-3 times daily after cleaning. Continue treatment up to 2-4 weeks.

Fusidic Acid 2% Cream	LP/SH FPL KT	B		Treatment of impetigo, infected wounds, folliculitis, boils, sycosis barbae, carbuncles, hidradenitis, paronychia and erythrasma where skin infections caused by Staphylococci, Streptococci, Propionibacterium acnes, Corynebacterium minutissimum, and other organisms sensitive to fusidic acid.	Apply to affected area 2 - 3 times daily for a duration of 7 days. Do not use for more than 2 weeks.
Fusidic Acid 2% in Betamethasone Valerate 0.1% Cream	LP/SH SS	A/KK		Inflammatory dermatosis where bacterial infection is likely to occur eg atopic eczema, discoid eczema, stasis eczema, seborrhoic dermatitis, contact dermatitis, lichen simplex chronicus, psoriasis, discoid lupus erythematosus.	Uncovered lesion - Apply 2 to 3 times daily. Covered lesions - Less frequent applications may be adequate.
Gamma Benzene Hexachloride 0.1% Lotion	LP/SH FP KT	A/KK		i) Only for scabies in adult weighing more than 50kg. Use should be restricted to patients who have failed treatment with or cannot tolerate other medications that pose less risk. ii) Treatment of head lice.	i) Only for single application. Adult: Apply a thin layer of 1% topical preparation onto all skin areas from the neck to toes. Completely wash off from the body with warm water after 8-12 hr. ii) Apply lotion into the scalp and hair. Leave the lotion for 4 minutes. Remove the lice using comb afterwards.
Gentamicin 0.1% Cream	LP/SH FPL KT	A*		For the treatment of primary and secondary skin infections caused by susceptible bacteria.	Apply 2-3 times daily.
Miconazole 2% Cream	LP/SH SS	C		i) Fungal infections: Tinea pedis, Tinea corporis, Tinea capitis and other dermatophyte infections caused by Trichophyton and Epidermophyton species ii) Antifungal agent that has been in various candida infections including vaginal candidiasis.	Apply sparingly and rub gently onto affected area 1-2 times daily continuing for 14 days after lesions have healed.
Mupirocin 2% Ointment	LP/SH SS *Skin *HDU *Paediatric (inpatient)	A		Bacterial skin infections by Staphylococcus and Streptococcus sp.	ADULT and CHILD: Apply up to three times daily for up to 10 days.
Neomycin 0.5% Cream	APPL FP KT	B		Infections of the skin due to susceptible organisms.	Apply sparingly to affected area up to 3 times daily (For short term use, 1 - 2 weeks).
Nystatin 100,000 units/g Cream	LP/SH FP KT	C		Prevention and treatment of cutaneous infections caused by Candida albicans.	Apply liberally to affected area twice daily or as required. After lesion has disappeared continue treatment for 10 days to prevent relapses. Nail infection: Cut nails as short as possible. Apply cream once daily until growth of new nail has set in.
Pectin, Sodium Carboxymethylcellulose Hydrocolloids Gel	LP/SH FPD KT *Surgical *Ortho	MDA	Duoderm Gel	Hydration and management of partial and full thickness wound such as pressure source, leg ulcer and diabetic ulcer.	Apply to the affected area during routine dressing changes.
Permethrin 5% w/v Lotion	LP/SH FPL KT *Skin *Paediatric	A/KK		Treatment of scabies.	Apply thoroughly to all body parts from the head to soles of the feet, paying particular attention to all the folds and creases. Leave medication on for 8 – 14 hours, and then wash off completely. Not recommended for children less than 2 months of age. Single application usually curative. May reapply after ONE week if live mites reappear.
Silver Sulphadiazine 1% Cream	APPL FPL KT	B		Prevention and treatment of infections in severe burns, leg ulcers where infections may prevent healing and for the prophylaxis of infections in skin grafting.	Burns : Apply 3 mm thick layer bd with sterile applicator. Leg ulcer; apply at least 3 times a week.

18.10 DISINFECTANTS, SKIN CLEANSERS & ANTISEPTICS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE

Acetic Acid 2% Lotion	LP/SH FP KT	GALENICAL PRODUCT		Disinfectant.	
Acetic Acid 5% Lotion	LP/SH FP KT	GALENICAL PRODUCT		Disinfectant.	
Acriflavine 0.1% Lotion	APPL SS	C+	**Flavin Lotion**	Infected skin, lesions, cuts, abrasions, wounds and burns.	Apply undiluted tds to the affected part .
Alcohol 96% (External Use)	APPL FP KT	GALENICAL PRODUCT		Antimicrobial preservative, disinfectant, skin penetrant, solvent.	
Alcohol 70% Solution	LP/SH SS	C+		Use as antiseptic and disinfectant.	Apply to the skin undiluted or when needed.
Cetrimide 2% Lotion	APPL FP KT	C+		As shampoo and cleansing agent.	Apply to affected area.
Chlorhexidine 1:200 (0.5%) in Alcohol (Hand Disinfectant)	LP/SH FP KT infection control unit KT	C+		Use as hand disinfectant for pre-surgical operation and skin disinfectant.	Pre-op surgical hand disinfection: Spread 5ml throughly over both hands and forearms, rubbing vigorously. When dry apply a further 5ml and repeat procedure. Antiseptic hand disinfection on the ward: Spread 3ml throughly over the hands and wrist rubbing vigorously until dry. Disinfection of patient's skin: Prior to surgery, apply to a sterile swab and rub thoroughly over the operation site for a minimum of 2 mins
Chlorhexidine Gluconate 1% Cream	APPL SS *O&G	C+		As a disinfectant cream. It can be used for disinfection or lubrication during gynaecological and obstetric procedures or childbirth.	Apply as required on affected area after cleaning
Chlorhexidine Gluconate 5% Solution	APPL FP KT	C+		Use as antiseptic and disinfectant in: i) Preoperative skin disinfection ii) Emergency disinfection of instruments iii) Wounds or burns	To be used as diluted solution: (i) 0.5 % w/v Aqueous solution : Dilute 10 ml of solution with 70% alcohol up to 100ml. (ii) 0.5 % w/v Aqueous solution : Dilute 10 ml of solution with 70% alcohol up to 100ml. Immerse for 2 minutes (iii) 0.05 % w/v aqueous solution : Dilute 1 ml of solution with 100 ml of sterile water.
Chlorhexidine Gluconate 2% in Alcohol 70% Solution	LP/SH SS	C		Use as disinfectant in central venous catheter care bundle.	Skin Preparation:Use Chlorhexidine Gluconate 2% in Isopropyl Alcohol 70% and allow to dry. Catheter acces:Apply to catheter ports or hubs prior to accessing the line for administering fluids or injections.
Chlorhexidine 1:200 in Aqueous Lotion	LP/SH FP KT	GALENICAL PRODUCT		i) Preoperative skin disinfection ii) Wounds or burns iii) Emergency disinfection of instruments.	Apply to affected area.
Chlorhexidine 1:200 in Methylated Spirit 70% Lotion	LP/SH FP KT	GALENICAL PRODUCT		i) Preoperative skin disinfection ii) Wounds or burns iii) Emergency disinfection of instruments.	Apply to affected area.
Chlorhexidine 1:2000 in Water Lotion	LP/SH FP KT	GALENICAL PRODUCT		i) Preoperative skin disinfection ii) Wounds or burns iii) Emergency disinfection of instruments.	Apply to affected area.
Hydrogen Peroxide 20 Volume Solution	APPL SS	C		Skin disinfection, particularly cleansing and deodorising wounds and ulcers.	Hydrogen Peroxide 6% (=approx. 20 vol) shall be dispensed. For cleansing wounds: 1.5% to 6% solution apply 2-3 times daily or when nescessary. As a mouthwash: rinse the mouth for 2-3 minutes with 15ml of hydrogen peroxide 6% diluted in half a tumblerful of warm water 2-3 times daily. Disinfecting cleaned equipment: immersion for 30 minutes in 6% solution. As ear drop for removal of wax: hydrogen peroxide 6% diluted with 3 parts of water preferably just before use.
Magnesium Sulphate 25% Lotion	LP/SH FP KT	GALENICAL PRODUCT		Inflammatory skin conditions such as boils and carbuncles.	Apply under dressing.
Methylated Spirit 70% Solution	LP/SH FP KT	GALENICAL PRODUCT		Use as antiseptic and disinfectant.	Apply to the skin undiluted or when needed.
Potassium Permanganate 1:10,000 Solution	LP/SH FP KT	GALENICAL PRODUCT	**KMnO4**	Cleansing and deodorising suppurative eczematous reactions and wounds.	As soaks or wet dressing 1 - 3 times dly or as required.

Industrial Methylated Spirit 96%	APPL SS	GALENICAL PRODUCT		Disinfectant, antimicrobial preservative.	
Povidone Iodine 10% (equivalent to 1% iodine) Solution	LP/SH SS	GALENICAL PRODUCT		Skin operation prior to surgery, in cleansing open wounds, as an antiseptic for operative wounds infections.	To be applied undiluted in pre-operative skin disinfection and general antisepsis.
Proflavine Emulsion	LP/SH FP KT	GALENICAL PRODUCT		Topical antiseptic used in wound dressing.	
Silver Nitrate 10% Lotion	LP/SH FP KT	GALENICAL PRODUCT		Chronic granulomatous disease.	Apply with cotton applicator to wart or lesion 2-3 times per week as needed.
Sodium Chloride 0.9% Lotion	LP/SH FP KT	GALENICAL PRODUCT	**NaCl**	Cleansing of tissues, body cavities, wounds	Apply as needed.
Turpentine Oil	LP/SH FP KT	GALENICAL PRODUCT		Disinfectant.	

18.11 MISCELLANEOUS DERMATOLOGY

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Tacrolimus 0.1% Ointment	LP/SH FPL KT *Skin	A*		For short-term and intermittent long-term therapy in the treatment of patients with moderate to severe atopic dermatitis in whom the use of alternative, conventional therapies are deemed inadvisable because of potential risks, or in the treatment of patients who are not adequately responsive to or are intolerant of alternative, conventional therapies.	Adult ≥16 years: Apply 0.03% or 0.1% to the affected skin twice daily and rub in gently and completely. Children ≥ 2 years: Apply 0.03% ointment thinly to the affected skin bd and rub in gently and completely. Treatment should be continued for 1 week after clearing of signs & symptoms of atopic dermatitis.

19 IMMUNOLOGICAL PRODUCTS AND VACCINES

19.1 VACCINES AND ANTISERA

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Haemophilus Influenza Type B Conjugate Vaccine Injection (Single Dose)	APPL FPD KT *Surgical (specialist)	C+		Immunisation of infants against Haemophlius Influenza Type B.	0.5 ml by IM. In patients with thrombocytopenia or bleeding disorders, vaccine can be administered by SC.
Hepatitis B Vaccine Injection	APPL SS	C+		Immunization against infections caused by Hepatitis B virus.	Dose depends on the products used. Please refer to package insert. Example: 1. Euvax-B Adult (from 16 years old) - 20 mcg/dose Neonates, infants & children up to and including 15 years - 10 mcg/dose 2. Engerix-B Adult (from 20 years old) - 20 mcg/dose Neonates, infants & children up to and including 19 years - 10 mcg/dose Second dose to be given after 1 month and booster dose after 6 months.
Meningococcal A, C, Y, W 135 Vaccine Injection	APPL FPD KT *Surgical (specialist)	B		Immunisation against meningococcal diseases caused by Neisseria meningitis Group A, Group C, Group Y or Group W-135.	Prophylaxis: 0.5 ml IM injection.
Pneumococcal Vaccine (Polyvalent)	LP/SH FPD KT	A		Prevention of pneumococcal infections in high risk subjects from the age of 2 years including patient with a history of splenectomy or scheduled splenectomy.	Primary injection: 1 single injection (0.5ml) only. Booster: Must not be given within 5 years except in very high risk patient who received the vaccine while under immunosuppressive treatment.

Rabies Vaccine Injection	LP/SH FPD KT	B		Pre-exposure and post-exposure vaccination against rabies.	Pre-exposure (prophylaxis): 3 doses scheduled on D0, D7 and D28. Booster dose after every 6 months to 5 years (refer to manufacturer's recommendations). Post-exposure prophylaxis: use after attack of a potential rabid animal: 1 dose on D0, D3, D7, D14 and D28. In previously vaccinated individuals 2 doses on D0 and D3.
Tetanus Toxoid Injection	APPL SS	C+		Immunization against tetanus infection.	2 doses of 0.5 mL IM at an interval of 4-8 week, followed by the 3rd dose 6-12 month later. Booster: 0.5 mL IM every 10 year.

19.2 IMMUNOGLOBULINS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Anti RhD Immunoglobulin Injection 250 mcg/2 ml Injection (125 mcg = 625 IU)	APPL SS	B	Rhogam	Prevention of Rh(D) sensitisation to Rh(D) negative woman: i) Pregnancy/delivery of Rh(D)-positive infant ii) Abortion/threatened abortion, ectopic pregnancy or hydatidiform mole iii) Transplacental haemorrhage resulting from antepartum haemorrhage, amniocentesis, chorionic biopsy or obstetric manipulative procedures e.g. external version or abdominal trauma.	i) Antenatal prophylaxis: According to general recommendations, currently administered doses range from 50 – 330 micrograms or 250 - 1650 IU. For specific details, please refer to product's package insert. ii) Postnatal prophylaxis: According to general recommendations, currently administered doses range from 100 – 300 micrograms or 500 – 1500 IU. For specific details, please refer to product's package insert.
Hepatitis B Immunoglobulin (Human) Injection	LP/SH FPD KT	A		i) For post-exposure prophylaxis of hepatitis B ii) Prophylaxis against recurrence of hepatitis B infection in chronic hepatitis B post liver transplantation.	i) Adults: Recommended Dose: 1000-2000 IU IM and if necessary, the dose should be increased or repeated. Children: Inject 32-48 IU/kg of body weight, should be administered within 7 days after exposure to HBsAg (preferably within 48 hrs). Neonates: Recommended Initial Dose: 100-200 IU. The 1st dose should be administered within 5 days after birth (preferably within 48 hrs) and booster dose should be 32-48 IU/kg body weight. The booster dose should be administered between 2 and 3 months after the 1st administration. ii) Different regimens depending on hepatitis B virus (HBV) DNA positivity.
Human Normal Globulin Injection	APPL FPD KT	A	1)Intragam 5 g/50 ml (PDN stock) 2)IV Globulin SN Inj 2.5g/25ml	i. Replacement therapy such as: a) Primary immunodeficiency syndromes b) Severe secondary hypogammabulinaemia and recurrent infections c) Congenital or acquired immune deficiency syndrome with recurrent infections d) Allogeneic haematopoietic stem cell transplantation (HSCT) ii. Immunomodulation such as: a) Immune thrombocytopenic purpura (ITP) in children or adults at high risk of bleeding or prior to surgical interventions to correct the platelet count b) Guillain-Barre syndrome c) Kawasaki disease	0.2-2g/kg as required Dosing and frequency of administration are according to product insert and protocol.
Immunoglobulin Tetanus Human 250 Units/Vial Injection	LP/SH FPD KT	B		Passive immunization against tetanus.	Prophylaxis of tetanus: IM 250 units. Treatment of tetanus: IM 30 - 300 units/kg.

20 ANAESTHESIA

20.1 INDUCTION/ MAINTENANCE

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Desflurane Liquid	LP/KKM SS *Anaes	A		i) induction and maintenance of anaesthesia in adults ii) Maintenance of anaesthesia in infants and children.	ADULT: Induction, initially 3% in oxygen or nitrous oxide/oxygen and increased by 0.5%-1% every breaths or as tolerated (up to 11%), until loss of consciousness. Maintenance: 2.5%-8.5% with or without concomitant nitrous oxide. CHILD: maintenance, inhaled in concentrations of 5.2%-10% with or without concomitant nitrous oxide.
Dexmedetomidine HCl 100 mcg/ml Injection	LP/KKM SS *Anaes	A*		i) Sedation of intubated and mechanically ventilated ICU patients. For use only by specialist anaesthetist ii) For sedation of non-intubated patients prior to and/or during surgical and other procedures.	i) Not to be infused for more than 24 hours, 1 mcg/kg over 10 minutes as loading dose. Maintenance dose: 0.2 - 0.7 mcg/kg/hr ii) Not to be infused for more than 24 hours, 1 mcg/kg over 10 minutes as loading dose. Maintenance dose: 0.2 - 0.7 mcg/kg/hr.
Etomidate 20 mg/10 ml Injection	LP/SH FPD KT *Anaes *A&E	A*		Induction of general anaesthesia for haemodynamically unstable patients.	Adult: 300 mg/kg given slowly over 30-60 seconds into a large vein in the arm. Child: Up to 30% more than the standard adult dose. Elderly: 150-200 mcg/kg, subsequently adjusted according to effects.

Ketamine 10 mg/ml Injection	APPL FPD KT/DD	B		Sole anaesthetic for short procedures or induction of anaesthesia in certain types of patients (e.g in shock states).	IV Initially, 1-4.5 mg/kg IV, a dose of 2 mg/kg produces anesthesia for 5-10 mins. IM Initially, 6.5-13 mg/kg IM, a dose of 10 mg/kg produces anesthesia for 12-25 mins.
Ketamine 50 mg/ml Injection	APPL FPD KT/DD	B		Sole anaesthetic for short procedures or induction of anaesthesia in certain types of patients (e.g in shock states).	IV Initially, 1-4.5 mg/kg IV, a dose of 2 mg/kg produces anesthesia for 5-10 mins. IM Initially, 6.5-13 mg/kg IM, a dose of 10 mg/kg produces anesthesia for 12-25 mins.
Midazolam 15 mg/3 ml Injection	LP/KKM SS/DD	A		Pre-operative sedation, induction of general anaesthesia, premedication and sedation in ICU and sedation for minor procedures.	Usual sedative range 2.5 - 7.5 mg (about 70 mcg/kg by IV injection over 30 secs). Premedication by IM injection 70 - 100 mcg/kg 30 - 60 mins before surgery. Elderly : 1 - 1.5 mg/kg Induction: Induction by slow IV infusion 200 - 300 mcg/kg (elderly 100 - 200 mcg/kg. CHILD over 7 years 150 - 200 mcg/kg). Max: 0.35 mg/kg. Sedation in ICU 0.03 - 0.2 mg/kg/hour.
Midazolam 5 mg/ml Injection	LP/KKM SS/DD	A, A/KK		Prescriber Category A: Pre-operative sedation, induction of general anaesthesia, premedication and sedation in ICU and sedation for minor procedures. Prescriber Category A/KK: For induction of intubation and sedation post-intubation	Pre-operative sedation, induction of general anaesthesia, premedication and sedation in ICU and sedation for minor procedures : Usual sedative range 2.5 - 7.5 mg (about 70 mcg/kg by IV injection over 30 seconds). Premedication by IM injection 70 - 100 mcg/kg 30 -60 minutes before surgery; ELDERLY: 1 - 1.5 mg/kg. Induction: Induction by slow IV infusion 200 - 300 mcg/kg (ELDERLY 100 - 200 mcg/kg. CHILD over 7 years 150 - 200 mcg/kg); Maximum: 0.35mg/kg. Sedation in ICU 0.03 - 0.2 mg/kg/hour For induction of intubation and sedation post-intubation : Induction: Induction by slow IV infusion 200 - 300 mcg/kg (ELDERLY 100 - 200 mcg/kg. CHILD over 7 years 150 - 200 mcg/kg); Maximum: 0.35mg/kg. Sedation: 0.03 - 0.2 mg/kg/hour
Midazolam 7.5 mg Tablet	LP/SH FPD KT/DD	A/KK		Pre and post-operative sedation.	ADULT: Usually 7.5 - 15 mg at bedtime; or for premedication, 30 - 60 mins. before the procedure. For ELDERLY, debilitated or impaired liver/kidney function : 7.5 mg.
Propofol 10 mg/ml (1%) Injection	APPL SS	A*		i) Induction & maintenance of general anaesthesia. ii) Sedation of ventilated patients in intensive care	Adult: Induction: 20- 40 mg by injection or infusion every 10 sec. Usual dose: 1.5-2.5 mg/kg. Maintenance: 4-12 mg/kg/hr or intermittent bolus inj of 20-50 mg. Child: >8 yr: Induction dose of 2.5 mg/kg. Maintenance dose: 9-15 mg/kg/hr by IV infusion or intermittent bolus inj. Elderly: Including neurosurgical and debilitated patients: Infuse at a rate of 20 mg every 10 sec. Maintenance: 3-6 mg/kg/hr. Usual dose needed: 1-1.5 mg/kg. Duration of use : Can be administered for a maximum period of 7 days. Sedation: 0.3 - 4 mg/kg/hour up to 3 days
Sevoflurane Liquid	APPL SS	A*		To be used only for i) induction and ii) maintenance of anaesthesia.	i) Adult: Given via a calibrated vaporiser: Up to 5% v/v with oxygen or a mixture of oxygen and nitrous oxide. Child: Given via a calibrated vaporiser: Up to 7% v/v. ii) Adult: 0.5-3% v/v with or without nitrous oxide. Child: 0.5-3% v/v with or without nitrous oxide.
Thiopental Sodium 500 mg Injection	APPL SS/DD	B		i) General anaesthesia, induction ii) Anticonvulsant for cases resistant to conventional anticonvulsants in the ICU.	i) ADULT : For induction 200 - 400 mg. For repeat injection 3 - 5 mg/kg over 10 - 15 seconds until desired depth of anaesthesia is obtained. Not FDA approved for use in pediatric patients ii) 75 - 125 mg IV single dose; for local anaesthetic induced convulsion: 125 - 250 mg IV over 10 minutes.

20.2 NEUROMUSCULAR BLOCKER

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Atracurium Besylate 10 mg/ml in 2.5 ml Injection	APPL SS	A*		Muscle relaxant in general anaesthesia, Endotracheal intubation, Aid controlled ventilation.	Adult & childn >2 mth 0.3-0.6 mg/kg IV. Endotracheal intubation dose: 0.5-0.6 mg/kg. Supplementary dose: 0.1-0.2 mg/kg as required. Continuous infusion rates of 0.3-0.6 mg/kg/hr to maintain neuromuscular block during long surgical procedure.

Rocuronium Bromide 10 mg/ml Injection	LP/KKM SS *Anaes	A*		As an adjunct to general anaesthesia to facilitate endotracheal intubation, to provide skeletal muscle relaxation during surgery and to facilitate mechanical ventilation in adults, children and infants from 3 months of age.	Adult: Initial: 0.6mg/kg. Higher doses of 1 mg/kg may be used for intubation during rapid sequence induction of anaesthesia. Maintenance: 0.15mg/kg (may reduce to 0.075-0.1 mg/kg if inhalational anaesthesia is used) or by infusion at a rate of 0.3- 0.6mg/kg/hr (0.3-0.4mg/kg/hr if inhalational anaesthesia is used). Doses should be based on ideal body weight for obese patients weighing >30% above the ideal body weight. Child: Infants and children >1 mth: Initially: 0.6mg/kg. Maintenance: 0.15mg/kg or by infusion at a rate of 0.3-0.6mg/kg/hr, maintenance doses may be required more frequently than in adult patients. Elderly/patients with hepatic and/or biliary tract disease and/or renal impairment: Initially: 0.6mg/kg. Maintenance: 0.075-0.1 mg/kg or by infusion at a rate of 0.3-0.4mg/kg/hr.
Suxamethonium Chloride 50 mg/ml Injection	APPL SS	B		As an adjunct to general anaesthesia to facilitate endotracheal intubation, to provide skeletal muscle relaxation during surgery and to facilitate mechanical ventilation	Intravenous: Muscle relaxant in general anaesthesia Adult: As chloride: single dose of 0.3-1.1 mg/kg injected; supplementary doses of 50-100% of the initial dose may be given at 5-10 min intervals. Max dose (repeated IV injection or continuous infusion): 500 mg/hr Child: As chloride: <1 yr: 2 mg/kg; 1-12 yr: 1 mg/kg. Intramuscular: Muscle relaxant in general anaesthesia Adult: As chloride: 3-4 mg/kg. Max total dose: 150 mg Child: As chloride: <1 yr: Up to 4- 5 mg/kg; ≥1 yr: Up to 4 mg/kg. Max dose: 150 mg.

20.3 TOPICAL ANAESTHESIA

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Ethyl Chloride 100 ml Spray	APPL SS	C		For minor surgical procedures including lancing boils, incision and drainage of small abscesses, pain due to athletic injuries and pain due to injection administration.	Spray to affected area at a distance of about 30 cm until a fine white film is produced.
Lidocaine 25 mg and Prilocaine 25 mg Cream	LP/SH FPD KT *Paediatric *ENT	A	EMLA	Surface anaesthesia of the skin in connection with needle insertion and for superficial surgical procedures.	Apply a thick layer under occlusive dressing. Dosing is according to product insert
Lignocaine (Lidocaine) 10% w/w Spray	LP/SH FPD KT *ENT *A&E	B		i. For surface anaesthesia in dental practice, in otorhinolaryngology and paracentesis ii. For obstetric and gynaecology- related procedures as supplementary pain control. Nota: Maklumat dos bagi indikasi baharu adalah sama seperti maklumat bagi indikasi sedia ada i.e. Spray to affected part.	Spray to affected part.
Lignocaine 2% Jelly	LP/SH SS	B		Use for endotracheal tubes and instruments, painful procedures in the ear, nose and throat, burns, wounds, abrasions, lacerations; catheterisation of the male and female urethra and for symptomatic treatment of cystitis and urethritis.	Apply to affected area 10 mins before catheterization, etc.

20.4 LOCAL ANAESTHESIA

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Bupivacaine 0.5% Heavy Injection	LP/KKM SS	A		Used for spinal anaesthesia.	ADULT: 2 - 4 ml. Not to exceed 2 mg/kg in a single dose.
Bupivacaine 0.5% Injection	LP/SH FPD KT	B		For peripheral sympathetic nerve and epidural (excluding caudal) anaesthesia and obstetrics anaesthesia.	Regional nerve block or epidural block: 15 - 30 ml. Nerve block of finger or toe: 2 - 6 ml. Max: 2 mg/kg body weight in any 4 hours period, equivalent to 25 - 30 ml in adults of average weight.
Bupivacaine 0.5% with Adrenaline 1:200,000 Injection	LP/SH FPD KT	B		Regional nerve block or epidural block.	10 - 40 ml (0.25 %) or maximum : 2 mg/kg body weight in any 4 hours period, equivalent to 25 - 30 ml of 0.5 % solution.
Levobupivacaine 5 mg/ml Injection	LP/SH FPD KT	A		Production of local or regional anesthesia for surgery and obstetrics, and for postoperative pain management.	Surgical anesthesia: Lumber epidural: 10 - 20 ml (50 - 150 mg) , caesarean section : 15 - 30 ml (75 - 150 mg), intrathecal: 3 ml (15 mg), peripheral nerve block : 1 - 40 ml, ilioinguinal/iliohypogastric block. CHILD : 0.25 - 0.5 ml/kg (1.25-2.5 mg/kg).

Lignocaine 2% with Chlorhexidine 0.05% Gel	LP/SH SS *A&E *Surgical	B		To provide local anaesthesia and lubrication during catheterization, exploration by sound and other endourethral operations and examinations, cytoscopy and symptomatic treatment of painful cystitis and urethritis.	Adult Male: Instil 20 mL slowly into the urethra until it reaches external sphincter, proximal to the prostrate. Subsequently, apply compression at the corona for several mins. Fill the length of the urethra w/ the remaining gel. Sounding procedure or cytoscopy: Instill 40 mL (in 3-4 portions) into the insertion area then allow 5-10 mins for anaesthesia to take effect. Adult Female: Prior to urological procedure, instill 5-10 mL in small portions to fill the whole urethra & allow anaesth to take effect in 3-5 mins. Children <12 yr: - Up to 6 mg/kg.
Lignocaine HCl (Lidocaine) 2% Intramuscular/Subcutaneous Injection	APPL SS	B		For local or regional anaesthesia and nerve block. Not for IV use.	Local anesthesia : ADULT Maximum: 100 mg; CHILD Maximum: 3 mg/kg.
Lignocaine HCl 5% and Phenylephrine HCl 0.5% Nasal Spray	LP/SH FPD KT	A*		Preparation of nasal mucosa for surgery (eg. Cautery to Little's area), aid the treatment of acute nose bleeds and removal of foreign bodies from the nose, topical anaesthesia of the pharynx prior to direct or indirect laryngoscopy, topical anaesthesia and local vasoconstriction prior to endoscopy of the upper airways.	Adults and children over 12 years : 5 squirts per nostril. Children: 8 to 12 years 3 squirts per nostril, 4 to 8 years 2 squirts per nostril, 2 to 4 years 1 squirt per nostril. Doses are to be administered once only.
Mepivacaine Hydrchloride Injection 2% with Adrenaline (1:100000) Injection	LP/SH FPD KT *ENT *OMFS	B		For the production of local anaesthesia for dental procedures including infiltration and nerve blocks	ADULT: 2.2ml for routine procedure. Max: 3 cartridges. CHILD: 6-14 years: 1.6ml. Max: 3.3mL. 3-6 years 1.1 to 2.2ml. Dosing is according to product insert.
Ropivacaine HCl 2 mg/ml Injection	LP/SH FPD KT *Anaes *Acute Pain Service	A*		i) Surgical anaesthaesia including obstetrics ii) Acute pain management.	Dose adjusted according to patient physical status and nature of procedure. i) Lumbar epidural: 15-25 ml of 7.5 mg/ml solution; Caesarean section, 15-20 ml of 7.5 mg/ml solution in incremental doses (max total dose 150 mg). ii) Lumbar epidural: 10-20 ml of 2 mg/ml solution followed by 10-15 ml of 2 mg/ml solution at interval at of least 30 minutes. Labour pain 6-10 ml/hour of 2 mg/ml solution.
Ropivacaine HCl 7.5 mg/ml Injection	LP/SH FPD KT *Anaes *Acute Pain Service	A*		i) Surgical anaesthaesia including obstetrics ii) Acute pain management.	Dose adjusted according to patient physical status and nature of procedure. i) Lumbar epidural: 15-25 ml of 7.5 mg/ml solution; Caesarean section, 15-20 ml of 7.5 mg/ml solution in incremental doses (max total dose 150 mg). ii) Lumbar epidural: 10-20 ml of 2 mg/ml solution followed by 10-15 ml of 2 mg/ml solution at interval at of least 30 minutes. Labour pain 6-10 ml/hour of 2 mg/ml solution.

20.5 MISCELLANEOUS ANAESTHESIA

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Atropine Sulphate 1 mg/ml Injection	APPL SS	B		i) Reduce vagal inhibition, salivary and bronchiol secretion in anaesthesia ii) Reversal of excessive bradycardia iii) Reversal of effect of competitive muscle relaxants iv) Overdosage with other compounds having muscarinic action v) Organophosphate poisoning	i) Adult: 300-600 mcg IM/SC 30-60 minutes before anaesthesia. Alternatively, 300-600 mcg IV immediately before induction of anaesthesia. Child: >20 kg: 300-600 mcg; 12-16 kg: 300 mcg; 7- 9 kg: 200 mcg; >3 kg: 100 mcg. Doses to be given via IM/SC admin 30-60 minutes before anaesthesia. ii) Adult: 500 mcg every 3- 5 minutes. Total: 3 mg. Max Dosage: 0.04 mg/kg body weight. iii) Adult 0.6-1.2 mg before or with anticholinesterase iv) Adult: 0.6-1 mg IV/IM/SC, repeated every 2 hour v) Adult: 2 mg IV/IM, every 10-30 minutes until muscarinic effects disappear or atropine toxicity appears. In severe cases, dose can be given as often as every 5 minutes. In moderate to severe poisoning, a state of atropinisation is maintained for at least 2 days and continued for as long as symptoms are present. Child: 20 mcg/kg given every 5-10 minutes.
Glycopyrrolate 200 mcg/ml Injection	LP/SH FPD KT *Anaes *Paediatric	A*		i) To reduce secretions (respiratory tract) for certain types of surgery. ii) Reversal of neuromuscular block in patients where atropine is contraindicated.	i) ADULT: Pre-op: 4 mcg/kg via IM administration 30-60 mins before procedure. Intraoperative: 100mcg via IV administration, repeat at 2-3 min intervals when needed. Max: 400 mcg/dose. CHILD: 4 to 8 mcg/kg IM or IV (maximum 200mcg), may be repeated if necessary, during operation. ii) ADULT: 200 mcg by IV for each 1 mg of neostigmine or 5 mg pyridostigmine. CHILD: 10 mcg/kg IV for each 50mcg/kg neostigmine or equivalent dose of pyridostigmine. *Dosing is individualised and according to product insert/ protocol*
Sodium Citrate 0.3 M Solution	LP/SH FP KT	B		Prophylaxis for aspiration pneumonitis (use as an oral solution).	Dose depending on clinical cases. Usually, 30 ml given 10- 60 minutes before anaesthesia prior to elective cesarean surgery.

Sugammadex 100 mg/ml Injection	LP/SH SS *Anaes *A&E	A*		Indicated for reversal of neuromuscular blockade induced by rocuronium and vecuronium in selective patient group: obese, elderly, underlying cardiovascular disease. For pediatric population, sugammadex is recommended for routine reversal.	2 mg/kg sugammadex is recommended, if spontaneous recovery has occurred up to at least the reappearance of second twitch tension of the train-of-four (T2). 4 mg/kg sugammadex is recommended if recovery has reached at least 1- 2 post-tetanic counts (PTC). For immediate reversal following administration of rocuronium a dose of 16 mg/kg sugammadex is recommended.

21 DIAGNOSTIC

21.1 RADIOCONTRAST MEDIA

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Not available					

21.2 DIAGNOSTIC AIDS AND TEST PREPARATIONS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Fluorescein 1 mg Ophthalmic Strip	LP/SH FPD KT *Ophthal *A&E *JPL	B		Used in diagnostic examinations	Moisten tip with tear fluid from lower fornix, sterile water or ophthalmic solution and gently stroke across the conjunctiva.
Hydroxyethyl Cellulose Jelly	LP/SH FPD KT	B	KY Jelly	For lubricating purpose.	Apply sufficiently for lubricating purpose.
Teepol Liquid	LP/SH SS			Detergent for washing up and general cleaning.	
Tuberculine PPD Injection	APPL SS	B		For routine Mantoux (tuberculin sensitivity) test.	10 units injected intradermally.

22 MISCELLANEOUS

22.1 GENERAL DISINFECTANTS

GENERIC NAME	CODE	CAT	TRADE NAME	INDICATION	DOSE
Sodium Dichloroisocyanurate Tablet	LP/SH SS	C	Germisep	Low and medium level disinfectant.	50 - 10,000 ppm av chlorine.
Sodium Hypochlorite Solution	LP/SH FP KT	C	Clorox	Low-level disinfectant and antiseptic.	Antiseptic: less than 0.5%. Disinfectant: 5%.