Newborn use only

Alert	Dexamethasone is available as Dexamethasone phosphate, dexamethasone sodium phosphate or
	dexamethasone base.
	Dexamethasone 1 mg = Dexamethasone phosphate 1.2 mg = Dexamethasone sodium phosphate 1.3
	mg approximately. In this formulary, differentiation is not made in the prescription or preparation of
	dexamethasone salts versus dexamethasone base as the dosage difference among them is not clinically
	significant and detailed prescription of salt and base is prone to errors.
	There is a non TGA registered commercial product, Dexsol® oral syrup. However, a SAS form is required
	for supply.
Indication	To facilitate weaning from assisted ventilation and improve lung function in infants at risk of chronic
	lung disease.
To facilitate extubation.	
Action	Long-acting glucocorticoid with potent anti-inflammatory action.
	No significant mineralocorticoid activity.
Drug type	Adrenal steroid hormone.
Trade name	IV: DBL Dexamethasone sodium phosphate Pfizer, DBL dexamethasone phosphate Hospira,
	dexamethasone phosphate Alphapharm, dexamethasone phosphate Mylan.
	Oral: Compounded by pharmacy in-house. Refer to special comments section.
	There is a non TGA registered commercial product, Dexsol® oral syrup. However, a SAS form is required
	for supply.
	New Zealand: Biomed product
Presentation	IV preparations
	All 4 IV preparations: 1 mL contains 4.4 mg of dexamethasone sodium phosphate equivalent to 4 mg
	dexamethasone phosphate and 3.4 mg of dexamethasone base.
	Oral preparations
	1 mg/mL and 0.1 mg/mL suspensions are compounded in-house.
	Refer to special comments section for further information on compounding.
Dose	NOTE: Daily dose can be given as single daily dose instead of 12 hourly doses.
	Low dose (DART) regimen (total cumulative dose 0.89 mg/kg) (1, 2)
	75 microgram/kg/dose 12 hourly for 3 days then,
	50 microgram/kg/dose 12 hourly for 3 days then,
	25 microgram/kg/dose 12 hourly for 2 days then,
	10 microgram/kg/dose 12 hourly for 2 days then cease.
	Moderate dose protocol (total cumulative dose 3.6 mg/kg) (modified 18-day regimen) (3)
	250 microgram/kg/dose 12 hourly for 3 days then,
	150 microgram/kg/dose 12 hourly for 3 days then,
	100 microgram/kg/dose 12 hourly for 3 days then,
	50 microgram/kg/dose 12 hourly for 3 days then,
	25 microgram/kg/dose 12 hourly for 6 days then cease.
	High dose regimen (total cumulative dose 7.98 mg/kg) (modified 42-day regimen) (3-5)
	250 microgram/kg/dose BD x 3 days then,
	150 microgram/kg/dose BD x 3 days then,
	135 microgram/kg/dose BD x 3 days then,
	120 microgram/kg/dose BD x 3 days then,
	110 microgram/kg/dose BD x 3 days then,
	100 microgram/kg/dose BD x 3 days then,
	90 microgram/kg/dose BD x 3 days then,
	80 microgram/kg/dose BD x 3 days then,
	70 microgram/kg/dose BD x 3 days then,
	65 microgram/kg/dose BD x 3 days then,
	60 microgram/kg/dose BD x 3 days then,

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	50 microgram/kg/dose BD x 3 days then,	
	100 microgram/kg/dose DAILY on alternate days x 3 doses	
	Extubation regimen (6)	
	250 microgram/kg 8 hourly for up to 3 doses.	
	Commence 4 hours before extubation.	
Dose adjustment	Therapeutic hypothermia – Not applicable.	
,,	ECMO – Not applicable.	
	Renal impairment – Not applicable.	
	Hepatic impairment – Not applicable.	
Maximum dose	750 microgram/kg/day	
Total cumulative	Low = less than 2 mg/kg	
dose	Moderate = 2 to 4 mg/kg; and	
	High = greater than 4 mg/kg.	
Route	IV, oral.	
Preparation		
reputation	Note: 4.4 mg/mL of dexamethasone sodium phosphate = 4 mg/mL of dexamethasone phosphate	
	equivalent to 3.4 mg/mL Dexamethasone.	
	Draw up 0.6 mL (equivalent to 2000 microgram dexamethasone) and add 9.4 mL of sodium chloride	
	0.9% to make a final volume of 10 mL with a concentration of 200 microgram/mL.	
	If volume is too small, further dilute: Draw up 1 mL of solution (200 microgram of dexamethasone) and	
	add 9 mL of sodium chloride 0.9% to make a final volume of 10 mL with a concentration of 20	
	microgram/mL.	
	<b>Oral:</b> Prepared by pharmacy in-house (check which strength is stocked with Pharmacy Department).	
	Strengths available:	
	0.1 mg/mL oral solution or suspension	
	Further dilution at the time of administration at bedside:	
	Further dilution may be required if the prescribed volume is too small (e.g.<0.1 mL)	
	To prepare 0.05 mg/mL (50 microgram/mL) solution or suspension: Using 0.1 mg/mL oral solution or	
	suspension: Draw up 2 mL of suspension (0.2 mg dexamethasone) and add 2 mL WFI to make a final	
	volume of 4 mL with a concentration of 0.05 mg/mL (50 microgram/mL).	
	Using 1 mg/mL oral solution or suspension: If volume is too small, further dilute: Draw up 1 mL of	
	solution or suspension (1 mg dexamethasone) and add 9 mL WFI to make a final volume of 10 mL with	
	a concentration of 0.1 mg/mL (100 microgram/mL).	
Administration	IV: Administer over 3–5 minutes.	
	Oral: Administer with feeds to minimise gastric irritation.	
	Oral Suspension: Shake the bottle well before drawing up required dose.	
Monitoring	Blood glucose levels (BGLs) at least daily. When on oral feeds measure BGL only if there is glucose in	
	urine.	
	Blood pressure at least daily.	
	Electrolytes.	
Contraindications	•	
Precautions	Use preservative free drug where possible.	
	Avoid early (< 8 days) treatment, higher dose and longer courses where possible to reduce side effects.	
	Avoid concurrent use with NSAIDs for PDA treatment.	
	Corticosteroids may increase susceptibility to or mask the symptoms of infection.	
Drug interactions	Barbiturates, phenytoin and rifampicin may increase the metabolism of dexamethasone.	
	Antithyroid agents may decrease the metabolism of dexamethasone.	

Newborn	use only
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Adverse reactions         Early (< 8 days) postnatal corticosteroids cause short-term adverse effects including gastrointestinal bleeding, intestinal perforation, hyperglycaemia, hypertension, hypertrophic cardiomyopathy and growth failure.           Late (after seven days) postnatal corticosteroids in high doses are associated with short-term side effects including gastrointestinal bleeding, higher blood pressure, glucose intolerance, severe retinopathy of prematurity and hypertrophic cardiomyopathy.           Other effects include:         Hypertriglyceridemia in association with hyperinsulinism and raised free fatty acids. Increase in total and immature neutrophil counts; increase in platelet count. Adrenal insufficiency is associated with higher doses (initial >0.2 mg/kg/day) longer courses (>14 days) of dexamethasone. May increase risk of infection.           Compatibility         Fluids (19): Glucose 5%, sodium chloride 0.9% TPN (Yesite) (19): ANNF consensus, extrapolated from Micromedex solutions – Amino acid solutions, fat emulsions. Y-site (19): AANF consensus, extrapolated from Micromedex solutions – Amino acid solutions, fat emulsions. Y-site (19): AANF consensus, extrapolated from Micromedex solutions – Amino acid solutions, fat emulsion, actreonam, cefazolin, cefepitine, cefotaxim, cefoxitin, ceftazidine, cefriaxone, chloramphenicol, clindamycin, cloxaaciliin, dexmedetomidine, digoxin, dittazem, dopamine, anlaprilat, ephedrine, epinephrine, epoietin alfa, fentanyl, fluconazole, furosemide, ganciclovir, glycopyrrolate, heparin, hydrocortisone sodium succinate, imipenem-cilastatin, indomethacin sodium trihydrate, insulin regular, isoproternol, ildocalim, norrepinephrine, octroide, oxalilin, pamifate, ephedrine, epinephrine, chotasitial, phenobarbital, piperacillin, reazobartam, potassium acetate, potassium chloride, procainamide, propofol, propranolch, etindinonate, pancuron	Aaverse	Forly (2.9 down) postportal portionator and a super short to the state of the state in the line of the state
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Myocardial hypertrophy and outflow obstruction may occur with higher doses and prolonged courses of dexamethasone. May increase risk of infection.           Compatibility         Fluids (19): Glucose 5%, sodium chloride 0.9% TPN (Y-site) (19): ANMF consensus, extrapolated from Micromedex solutions – Amino acid solutions, fat emulsions. Y-site (19): Acetaminophen, aciclovir, amikacin, aminophylline, amphotericin B cholesteryl sulfate complex, amphotericin B lipid complex, ascorbic acid injection, atenolol, atracurium, atropine, azithromycin, aztreonam, cefazolin, cefepime, cefotaxime, cefoxitin, ceftazidime, ceftriaxone, chloramphenicol, clindamycin, cloxacillin, dexmedetomidine, digoxin, diltiazem, dopamine, anlaprilat, ephedrine, epinephrine, epoietin alfa, fentanyl, fluconazole, furosemide, gancicovir, glycopyrrolate, heparin, hydrocortisone sodium succinate, imipenem-cilastatin, indomethacin sodium trihydrate, insulin regular, isoproterenol, lidocaine, lincomycin, linezolid, lorazepam, Meropenem, methylprednisolone sodium succinate, motoprolol, metronidazole, milrinome, morphine sulfate, naloxone, nitroglycerin, nitroprusside sodium, norepinephrine, octreotide, oxacillin, pamidronate, pancuronium, penicillin G, pentobarbital, phenobarbital, piperacillin, riperacillin-tazobactam, potassium acetate, potassium chloride, procainamide, propofol, propranolol, pyridoxine, ranitidine, remifentanil, sodium acetate, sodium bicarbonate, streptokinase, succinylcholine, theophylline, thiamine, thiopental, ticarcillin, clarulin-clavulanate, tolazoline, urokinase, vancomycin, vasopressin, vecuronium, verapamil, zidovudine. Variable compatibility (19): Ampicillin, azathioprine, erythromycin lactobionate, hydralazine.           Incompatibility         Fluids (19): Not tested: Glucose 10%, glucose 5% in sodium chloride 0.45%, sodium chloride 0.45%.           V-site (19): Amiodarone, calcium chloride, calcium		
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May increase risk of infection.           Compatibility         Fluids (19): Glucose 5%, sodium chloride 0.9% TPN (Y-site) (19): ANMF consensus, extrapolated from Micromedex solutions – Amino acid solutions, fat emulsions.           Y-site (19): Acetaminophen, aciclovir, amikacin, aminophylline, amphotericin B cholesteryl sulfate complex, amphotericin B lipid complex, ascorbic acid injection, atenolol, atracurium, atropine, azithromycin, aztreonam, cefazolin, cefepime, cefotaxime, cefoxitin, ceftazidime, ceftriaxone, chloramphenicol, clindamycin, cloxacillin, dexmedetomidine, digoxin, diltiazem, dopamine, anlaprilat, ephedrine, epinephrine, epoietin alfa, fentanyl, fluconazole, furosemide, ganciclovir, glycopyrrolate, heparin, hydrocortisone sodium succinate, imipenem-cilastatin, indomethacin sodium trihydrate, insulin regular, isoproterenol, lidocaine, lincomycin, linezolid, lorazepam, Meropenem, methylprednisolone sodium succinate, metoprolol, metronidazole, milrinone, morphine sulfate, naloxone, nitroglycerin, nitroprusside sodium, norepinephrine, octreotide, oxacillin, pamidronate, pancuronium, penicillin G, pentobarbital, phenobarbital, piperacillin, piperacillin, tazobactam, potassium acetate, potassium chloride, procainamide, propofol, propranolol, pyridoxine, ranitidine, remifentanii, sodium acetate, sodium bicarbonate, streptokinase, succinylcholine, theophylline, thiamine, thiopental, ticarcillin, ticarcillin-clavulanate, tolazoline, urokinase, vancomycin, vasopressin, vecuronium, verapamil, zidovudine.           Variable compatibility         Fluids (19): Not tested: Glucose 10%, glucose 5% in sodium chloride 0.9%, glucose 5% in sodium chloride 0.45%, sodium chloride 0.45%.           Y-site (19): Amiodarone, calcium chloride, calcium gluconate, caspofungin, chlorpromazine, ciprofloxacin, dobutamine, erythromycin, esmolol, gentamicin, glycopyrrolate, haloperi		
Compatibility         Fluids (19): Glucose 5%, sodium chloride 0.9%           TPN (Y-site) (19): ANMF consensus, extrapolated from Micromedex solutions – Amino acid solutions, fat emulsions.         Y-site (19): Acetaminophen, aciclovir, amikacin, aminophylline, amphotericin B cholesteryl sulfate complex, amphotericin B lipid complex, ascorbic acid injection, atenolol, atracurium, atropine, azithromycin, aztreonam, cefazolin, cefepime, cefotaxime, cefoxitin, ceftazidime, ceftriaxone, chloramphenicol, clindamycin, cloxacillin, dexmedetomidine, digoxin, diltiazem, dopamine, anlaprilat, ephedrine, epinephrine, epoietin alfa, fentanyl, fluconazole, furosemide, ganciclovir, glycopyrrolate, heparin, hydrocortisone sodium succinate, imipenem-cilastatin, indomethacin sodium trihydrate, insulin regular, isoproterenol, lidocaine, lincomycin, linezolid, lorazepam, Meropenem, methylprednisolone sodium succinate, metoprolol, metronidazole, milrinone, morphine sulfate, naloxone, nitroglycerin, nitroprusside sodium, norepinephrine, octreotide, oxacillin, pamidronate, pancuronium, penicillin G, pentobarbital, phenobarbital, piperacillin, piperacillin-tazobactam, potassium acetate, potassium chloride, procainamide, propofol, propranolol, pyridoxine, ranitidine, remifentanil, sodium acetate, sodium bicarbonate, streptokinase, succinylcholine, theophylline, thiamine, thiopental, ticarcillin-clavulanate, tolazoline, urokinase, vancomycin, vasopressin, vecuronium, verapamil, zidovudine.           Variable compatibility         Fluids (19): Not tested: Glucose 10%, glucose 5% in sodium chloride 0.95%, in sodium chloride 0.45%.           Y-site (19): Amiodarone, calcium chloride, calcium gluconate, caspofungin, chlopromazine, ciprofloxacin, dobutamine, erythromycin, esmolol, gentamicin, glycopyrrolate, haloperidol lactate, labetalol, magnesium sulfate, midazolam, pentamidine, phentolamine, promethazine, prot		
TPN (Y-site) (19): ANMF consensus, extrapolated from Micromedex solutions – Amino acid solutions, fat emulsions.         Y-site (19): Acetaminophen, aciclovir, amikacin, aminophylline, amphotericin B cholesteryl sulfate complex, amphotericin B lipid complex, ascorbic acid injection, atenolol, atracurium, atropine, azithromycin, aztreonam, cefazolin, cefepime, cefotaxime, cefoxitin, ceftaidime, ceftriaxone, chloramphenicol, clindamycin, cloxacillin, dexmedetomidine, digoxin, diltiazem, dopamine, anlaprilat, ephedrine, epinephrine, epoietin alfa, fentanyl, fluconazole, furosemide, ganciclovir, glycopyrrolate, heparin, hydrocortisone sodium succinate, imipenem-cilastatin, indomethacin sodium trihydrate, insulin regular, isoproterenol, lidocaine, lincomycin, linezolid, lorazepam, Meropenem, methylprednisolone sodium succinate, metoprolol, metronidazole, milrinone, morphine sulfate, naloxone, nitroglycerin, nitroprusside sodium, norepinephrine, octreotide, oxacillin, pamidronate, pancuronium, penicillin G, pentobarbital, phenobarbital, piperacillin, piperacillin-tazobactam, potassium acetate, potassium chloride, procainamide, propofol, propranolol, pyridoxine, ranitidine, remifentanil, sodium acetate, sodium bicarbonate, streptokinase, succinylcholine, theophylline, thiamine, thiopental, ticarcillin, claucillin, azathioprine, erythromycin lactobionate, hydralazine.         Incompatibility       Fluids (19): Not tested: Glucose 10%, glucose 5% in sodium chloride 0.9%, glucose 5% in sodium chloride 0.45%.         Y-site (19): Amiodarone, calcium chloride, calcium gluconate, caspofungin, chlorpromazine, ciprofloxacin, dobutamine, erythromycin, esmolol, gentamicin, glycopyrrolate, haloperidol lactate, labetalol, magnesium sulfate, midazolam, pentamidine, phentolamine, promethazine, protamine, rocuronium, tobramycin.         Stability       IV: Diluted solution is stable		
fat emulsions.Y-site (19): Acetaminophen, aciclovir, amikacin, aminophylline, amphotericin B cholesteryl sulfate complex, amphotericin B lipid complex, ascorbic acid injection, atenolol, atracurium, atropine, azithromycin, aztreonam, cefazolin, cefepime, cefotaxime, cefoxitin, ceftazidime, ceftriaxone, chloramphenicol, clindamycin, cloxacillin, dexmedetomidine, digoxin, diltiazem, dopamine, anlaprilat, ephedrine, epinephrine, epoietin alfa, fentanyl, fluconazole, furosemide, ganciclovir, glycopyrrolate, heparin, hydrocortisone sodium succinate, imipenem-cilastatin, indomethacin sodium trihydrate, insulin regular, isoproterenol, lidocaine, lincomycin, lincazolae, milrinone, morphine sulfate, naloxone, nitroglycerin, nitroprusside sodium, norepinephrine, octreotide, oxacillin, pamidronate, pancuronium, penicillin G, pentobarbital, phenobarbital, piperacillin, piperacillin, tazobactam, potassium acetate, potassium chloride, procainamide, propofol, propranolol, pyridoxine, ranitidine, remifentanil, sodium acetate, sodium bicarbonate, streptokinase, succinylcholine, theophylline, thiamine, thiopental, ticarcillin, clavulanate, tolazoline, urokinase, vancomycin, vasopressin, vecuronium, verapamil, zidovudine. Variable compatibility (19): Ampicillin, azathioprine, erythromycin lactobionate, hydralazine.IncompatibilityFluids (19): Not tested: Glucose 10%, glucose 5% in sodium chloride 0.9%, glucose 5% in sodium chloride 0.45%, sodium chloride 0.45%.Y-site (19): Amiodarone, calcium chloride, calcium gluconate, caspofungin, chlorpromazine, ciprofloxacin, dobutamine, erythromycin, esmolol, gentamicin, glycopyrrolate, haloperidol lactate, labetalol, magnesium sulfate, midazolam, pentamidine, phentolamine, protemazine, ciprofloxacin, dobutamine, erythromycin, esmolol, gentamicin, glycopyrrolate, haloperidol lactate, labetalol, magnesium sulfate, midazolam, pentamidine, phento	Compatibility	
Y-site (19): Acetaminophen, aciclovir, amikacin, aminophylline, amphotericin B cholesteryl sulfate complex, amphotericin B lipid complex, ascorbic acid injection, atenolol, atracurium, atropine, azithromycin, aztreonam, cefazolin, cefepime, cefotaxime, cefoxitin, ceftazidome, ceftriaxone, chloramphenicol, clindamycin, cloxacillin, dexmedetomidine, digoxin, diltiazem, dopamine, anlaprilat, ephedrine, epinephrine, epoietin alfa, fentanyl, fluconazole, furosemide, ganciclovir, glycopyrrolate, heparin, hydrocortisone sodium succinate, inipenem-cilastatin, indomethacin sodium trihydrate, insulin regular, isoproterenol, lidocaine, lincomycin, linezolid, lorazepam, Meropenem, methylprednisolone sodium succinate, metoprolol, metronidazole, milrinone, morphine sulfate, naloxone, nitroglycerin, nitroprusside sodium, norepinephrine, octreotide, oxacillin, pamidronate, pancuronium, penicillin ogentobarbital, phenobarbital, piperacillin, piperacillin-tazobactam, potassium acetate, potassium chloride, procainamide, propofol, propranolol, pyridoxine, ranitidine, remifentanil, sodium acetate, sodium bicarbonate, streptokinase, succinylcholine, theophylline, thiamine, thiopental, ticarcillin, clarcillin-clavulanate, tolazoline, urokinase, vancomycin, vasopressin, vecuronium, verapamil, zidovudine.IncompatibilityFluids (19): Not tested: Glucose 10%, glucose 5% in sodium chloride 0.9%, glucose 5% in sodium chloride 0.45%, sodium chloride 0.45%.Y-site (19): Amiodarone, calcium chloride, calcium gluconate, caspofungin, chlorpromazine, ciprofloxacin, dobutamine, erythromycin, esmolol, gentamicin, glycopyrrolate, haloperidol lactate, labetalol, magnesium sulfate, midazolam, pentamidine, phentolamine, promethazine, protamine, rocuronium, tobramycin.StabilityIV: Diluted solution is stable for 24 hours at 2–8°C Oral: As per Pharmacy Department.StorageAm		
complex, amphotericin B lipid complex, ascorbic acid injection, atenolol, atracurium, atropine, azithromycin, atreonam, cefazolin, cefepime, cefotaxime, cefoxitin, ceftazidime, ceftriaxone, chloramphenicol, clindamycin, cloxacillin, dexmedetomidine, digoxin, diltiazem, dopamine, anlaprilat, ephedrine, epinephrine, epoietin alfa, fentanyl, fluconazole, furosemide, ganciclovir, glycopyrrolate, heparin, hydrocortisone sodium succinate, imipenem-cilastatin, indomethacin sodium trihydrate, insulin regular, isoproterenol, lidocaine, lincomycin, linezolid, lorazepam, Meropenem, methylprednisolone sodium succinate, metoprolol, metronidazole, milrinone, morphine sulfate, naloxone, nitroglycerin, nitroprusside sodium, norepinephrine, octreotide, oxacillin, pamidronate, pancuronium, penicillin G, pentobarbital, phenobarbital, piperacillin, tazobactam, potassium acetate, potassium chloride, procainamide, propofol, propranolol, pyridoxine, ranitidine, remifentanil, sodium acetate, sodium bicarbonate, streptokinase, succinylcholine, theophylline, thiamine, thiopental, ticarcillin, ticarcillin-clavulanate, tolazoline, urokinase, vancomycin, vasopressin, vecuronium, verapamil, zidovudine.IncompatibilityFluids (19): Not tested: Glucose 10%, glucose 5% in sodium chloride 0.9%, glucose 5% in sodium chloride 0.45%, sodium chloride 0.45%.Y-site (19): Amiodarone, calcium chloride, calcium gluconate, caspofungin, chlorpromazine, ciprofloxacin, dobutamine, erythromycin, esmolol, gentamicin, glycopyrrolate, haloperidol lactate, labetalol, magnesium sulfate, midazolam, pentamidine, phentolamine, promethazine, protamine, rocuronium, tobramycin.StabilityIV: Diluted solution is stable for 24 hours at 2–8°C Oral: As per Pharmacy Department.StorageAmpoule: Store below 25°C. Protect from light.		
azithromycin, aztreonam, cefazolin, cefepime, cefotaxime, cefoxitin, ceftazidime, ceftriaxone, chloramphenicol, clindamycin, cloxacillin, dexmedetomidine, digoxin, diltiazem, dopamine, anlaprilat, ephedrine, epinephrine, epoietin alfa, fentanyl, fluconazole, furosemide, ganciclovir, glycopyrrolate, heparin, hydrocortisone sodium succinate, imipenem-cilastatin, indomethacin sodium trihydrate, insulin regular, isoproterenol, lidocaine, lincomycin, linezolid, lorazepam, Meropenem, methylprednisolone sodium succinate, metoprolol, metronidazole, milrinone, morphine sulfate, naloxone, nitroglycerin, nitroprusside sodium, norepinephrine, octreotide, oxacillin, pamidronate, pancuronium, penicillin G, pentobarbital, phenobarbital, piperacillin, piperacillin-tazobactam, potassium acetate, potassium chloride, procainamide, propofol, propranolol, pyridoxine, ranitidine, remifentanil, sodium acetate, sodium bicarbonate, streptokinase, succinylcholine, theophylline, 		
chloramphenicol, clindamycin, cloxacillin, dexmedetomidine, digoxin, diltiazem, dopamine, anlaprilat, ephedrine, epinephrine, epoietin alfa, fentanyl, fluconazole, furosemide, ganciclovir, glycopyrrolate, heparin, hydrocortisone sodium succinate, imipenem-cilastatin, indomethacin sodium trihydrate, insulin regular, isoproterenol, lidocaine, lincomycin, linezolid, lorazepam, Meropenem, methylprednisolone sodium succinate, metoprolol, metronidazole, milrinone, morphine sulfate, naloxone, nitroglycerin, nitroprusside sodium, norepinephrine, octreotide, oxacillin, pamidronate, pancuronium, penicillin G, pentobarbital, phenobarbital, piperacillin-tazobactam, potassium acetate, potassium chloride, procainamide, propofol, propranolol, pyridoxine, ranitidine, remifentanil, sodium acetate, sodium bicarbonate, streptokinase, succinylcholine, theophylline, thiamine, thiopental, ticarcillin, ticarcillin-clavulanate, tolazoline, urokinase, vancomycin, vasopressin, vecuronium, verapamil, zidovudine. Variable compatibility (19): Ampicillin, azathioprine, erythromycin lactobionate, hydralazine.IncompatibilityFluids (19): Not tested: Glucose 10%, glucose 5% in sodium chloride 0.9%, glucose 5% in sodium chloride 0.45%, sodium chloride 0.45%.Y-site (19): Amiodarone, calcium chloride, calcium gluconate, caspofungin, chlorpromazine, ciprofloxacin, dobutamine, erythromycin, esmolol, gentamicin, glycopyrrolate, haloperidol lactate, labetalol, magnesium sulfate, midazolam, pentamidine, phentolamine, promethazine, protamine, rocuronium, tobramycin.StabilityIV: Diluted solution is stable for 24 hours at 2–8°C Oral: As per Pharmacy Department.StorageAmpoule: Store below 25°C. Protect from light.		
ephedrine, epinephrine, epoietin alfa, fentanyl, fluconazole, furosemide, ganciclovir, glycopyrrolate, heparin, hydrocortisone sodium succinate, imipenem-cilastatin, indomethacin sodium trihydrate, insulin regular, isoproterenol, lidocaine, lincomycin, linezolid, lorazepam, Meropenem, methylprednisolone sodium succinate, metoprolol, metronidazole, milrinone, morphine sulfate, naloxone, nitroglycerin, nitroprusside sodium, norepinephrine, octreotide, oxacillin, pamidronate, pancuronium, penicillin G, pentobarbital, phenobarbital, piperacillin, piperacillin-tazobactam, potassium acetate, potassium chloride, procainamide, propofol, propranolol, pyridoxine, ranitdine, remifentanil, sodium acetate, sodium bicarbonate, streptokinase, succinylcholine, theophylline, thiamine, thiopental, ticarcillin, clavulanate, tolazoline, urokinase, vancomycin, vasopressin, vecuronium, verapamil, zidovudine. Variable compatibility (19): Ampicillin, azathioprine, erythromycin lactobionate, hydralazine.IncompatibilityFluids (19): Not tested: Glucose 10%, glucose 5% in sodium chloride 0.9%, glucose 5% in sodium chloride 0.45%, sodium chloride 0.45%. Y-site (19): Amiodarone, calcium chloride, calcium gluconate, caspofungin, chlorpromazine, ciprofloxacin, dobutamine, erythromycin, esmolol, gentamicin, glycopyrrolate, haloperidol lactate, labetalol, magnesium sulfate, midazolam, pentamidine, phentolamine, promethazine, protamine, rocuronium, tobramycin.StabilityIV: Diluted solution is stable for 24 hours at 2–8°C Oral: As per Pharmacy Department.StorageAmpoule: Store below 25°C. Protect from light.		
heparin, hydrocortisone sodium succinate, imipenem-cilastatin, indomethacin sodium trihydrate, insulin regular, isoproterenol, lidocaine, lincomycin, linezolid, lorazepam, Meropenem, methylprednisolone sodium succinate, metoprolol, metronidazole, milrinone, morphine sulfate, naloxone, nitroglycerin, nitroprusside sodium, norepinephrine, octreotide, oxacillin, pamidronate, pancuronium, penicillin G, pentobarbital, phenobarbital, piperacillin, tazobactam, potassium acetate, potassium chloride, procainamide, propofol, propranolol, pyridoxine, ranitidine, remifentanil, sodium acetate, sodium bicarbonate, streptokinase, succinylcholine, theophylline, thiamine, thiopental, ticarcillin, ticarcillin-clavulanate, tolazoline, urokinase, vancomycin, vasopressin, vecuronium, verapamil, zidovudine.Variable compatibility (19): Ampicillin, azathioprine, erythromycin lactobionate, hydralazine.IncompatibilityFluids (19): Not tested: Glucose 10%, glucose 5% in sodium chloride 0.9%, glucose 5% in sodium chloride 0.45%, sodium chloride 0.45%.Y-site (19): Amiodarone, calcium chloride, calcium gluconate, caspofungin, chlorpromazine, ciprofloxacin, dobutamine, erythromycin, esmolol, gentamicin, glycopyrrolate, haloperidol lactate, labetalol, magnesium sulfate, midazolam, pentamidine, phentolamine, promethazine, protamine, rocuronium, tobramycin.StabilityIV: Diluted solution is stable for 24 hours at 2–8°C Oral: As per Pharmacy Department.		
insulin regular, isoproterenol, lidocaine, lincomycin, linezolid, lorazepam, Meropenem, methylprednisolone sodium succinate, metoprolol, metronidazole, milrinone, morphine sulfate, naloxone, nitroglycerin, nitroprusside sodium, norepinephrine, octreotide, oxacillin, pamidronate, pancuronium, penicillin G, pentobarbital, phenobarbital, piperacillin, piperacillin-tazobactam, potassium acetate, potassium chloride, procainamide, propofol, propranolol, pyridoxine, ranitidine, remifentanil, sodium acetate, sodium bicarbonate, streptokinase, succinylcholine, theophylline, thiamine, thiopental, ticarcillin, ticarcillin-clavulanate, tolazoline, urokinase, vancomycin, vasopressin, vecuronium, verapamil, zidovudine.Variable compatibility (19): Ampicillin, azathioprine, erythromycin lactobionate, hydralazine.IncompatibilityFluids (19): Not tested: Glucose 10%, glucose 5% in sodium chloride 0.9%, glucose 5% in sodium chloride 0.45%, sodium chloride 0.45%.Y-site (19): Amiodarone, calcium chloride, calcium gluconate, caspofungin, chlorpromazine, ciprofloxacin, dobutamine, erythromycin, esmolol, gentamicin, glycopyrrolate, haloperidol lactate, labetalol, magnesium sulfate, midazolam, pentamidine, phentolamine, promethazine, protamine, rocuronium, tobramycin.StabilityIV: Diluted solution is stable for 24 hours at 2–8°C Oral: As per Pharmacy Department.		ephedrine, epinephrine, epoietin alfa, fentanyl, fluconazole, furosemide, ganciclovir, glycopyrrolate,
methylprednisolone sodium succinate, metoprolol, metronidazole, milrinone, morphine sulfate, naloxone, nitroglycerin, nitroprusside sodium, norepinephrine, octreotide, oxacillin, pamidronate, pancuronium, penicillin G, pentobarbital, phenobarbital, piperacillin, piperacillin-tazobactam, potassium acetate, potassium chloride, procainamide, propofol, propranolol, pyridoxine, ranitidine, remifentanil, sodium acetate, sodium bicarbonate, streptokinase, succinylcholine, theophylline, thiamine, thiopental, ticarcillin, ticarcillin-clavulanate, tolazoline, urokinase, vancomycin, vasopressin, vecuronium, verapamil, zidovudine. Variable compatibility (19): Ampicillin, azathioprine, erythromycin lactobionate, hydralazine.IncompatibilityFluids (19): Not tested: Glucose 10%, glucose 5% in sodium chloride 0.9%, glucose 5% in sodium chloride 0.45%, sodium chloride 0.45%.Y-site (19): Amiodarone, calcium chloride, calcium gluconate, caspofungin, chlorpromazine, ciprofloxacin, dobutamine, erythromycin, esmolol, gentamicin, glycopyrrolate, haloperidol lactate, labetalol, magnesium sulfate, midazolam, pentamidine, phentolamine, promethazine, protamine, rocuronium, tobramycin.StabilityIV: Diluted solution is stable for 24 hours at 2–8°C Oral: As per Pharmacy Department.StorageAmpoule: Store below 25°C. Protect from light.		heparin, hydrocortisone sodium succinate, imipenem-cilastatin, indomethacin sodium trihydrate,
naloxone, nitroglycerin, nitroprusside sodium, norepinephrine, octreotide, oxacillin, pamidronate, pancuronium, penicillin G, pentobarbital, phenobarbital, piperacillin, piperacillin-tazobactam, potassium acetate, potassium chloride, procainamide, propofol, propranolol, pyridoxine, ranitidine, remifentanil, sodium acetate, sodium bicarbonate, streptokinase, succinylcholine, theophylline, thiamine, thiopental, ticarcillin, ticarcillin-clavulanate, tolazoline, urokinase, vancomycin, vasopressin, vecuronium, verapamil, zidovudine. Variable compatibility (19): Ampicillin, azathioprine, erythromycin lactobionate, hydralazine.IncompatibilityFluids (19): Not tested: Glucose 10%, glucose 5% in sodium chloride 0.9%, glucose 5% in sodium chloride 0.45%, sodium chloride 0.45%.Y-site (19): Amiodarone, calcium chloride, calcium gluconate, caspofungin, chlorpromazine, ciprofloxacin, dobutamine, erythromycin, esmolol, gentamicin, glycopyrrolate, haloperidol lactate, labetalol, magnesium sulfate, midazolam, pentamidine, phentolamine, promethazine, protamine, rocuronium, tobramycin.StabilityIV: Diluted solution is stable for 24 hours at 2–8°C Oral: As per Pharmacy Department.StorageAmpoule: Store below 25°C. Protect from light.		insulin regular, isoproterenol, lidocaine, lincomycin, linezolid, lorazepam, Meropenem,
pancuronium, penicillin G, pentobarbital, phenobarbital, piperacillin, piperacillin-tazobactam, potassium acetate, potassium chloride, procainamide, propofol, propranolol, pyridoxine, ranitidine, remifentanil, sodium acetate, sodium bicarbonate, streptokinase, succinylcholine, theophylline, thiamine, thiopental, ticarcillin, ticarcillin-clavulanate, tolazoline, urokinase, vancomycin, vasopressin, vecuronium, verapamil, zidovudine. Variable compatibility (19): Ampicillin, azathioprine, erythromycin lactobionate, hydralazine.IncompatibilityFluids (19): Not tested: Glucose 10%, glucose 5% in sodium chloride 0.9%, glucose 5% in sodium chloride 0.45%, sodium chloride 0.45%.Y-site (19): Amiodarone, calcium chloride, calcium gluconate, caspofungin, chlorpromazine, ciprofloxacin, dobutamine, erythromycin, esmolol, gentamicin, glycopyrrolate, haloperidol lactate, labetalol, magnesium sulfate, midazolam, pentamidine, phentolamine, promethazine, protamine, rocuronium, tobramycin.StabilityIV: Diluted solution is stable for 24 hours at 2–8°C Oral: As per Pharmacy Department.StorageAmpoule: Store below 25°C. Protect from light.		methylprednisolone sodium succinate, metoprolol, metronidazole, milrinone, morphine sulfate,
pancuronium, penicillin G, pentobarbital, phenobarbital, piperacillin, piperacillin-tazobactam, potassium acetate, potassium chloride, procainamide, propofol, propranolol, pyridoxine, ranitidine, remifentanil, sodium acetate, sodium bicarbonate, streptokinase, succinylcholine, theophylline, thiamine, thiopental, ticarcillin, ticarcillin-clavulanate, tolazoline, urokinase, vancomycin, vasopressin, vecuronium, verapamil, zidovudine. Variable compatibility (19): Ampicillin, azathioprine, erythromycin lactobionate, hydralazine.IncompatibilityFluids (19): Not tested: Glucose 10%, glucose 5% in sodium chloride 0.9%, glucose 5% in sodium chloride 0.45%, sodium chloride 0.45%.Y-site (19): Amiodarone, calcium chloride, calcium gluconate, caspofungin, chlorpromazine, ciprofloxacin, dobutamine, erythromycin, esmolol, gentamicin, glycopyrrolate, haloperidol lactate, labetalol, magnesium sulfate, midazolam, pentamidine, phentolamine, promethazine, protamine, rocuronium, tobramycin.StabilityIV: Diluted solution is stable for 24 hours at 2–8°C Oral: As per Pharmacy Department.StorageAmpoule: Store below 25°C. Protect from light.		naloxone, nitroglycerin, nitroprusside sodium, norepinephrine, octreotide, oxacillin, pamidronate,
remifentanil, sodium acetate, sodium bicarbonate, streptokinase, succinylcholine, theophylline, thiamine, thiopental, ticarcillin, ticarcillin-clavulanate, tolazoline, urokinase, vancomycin, vasopressin, vecuronium, verapamil, zidovudine.Variable compatibility (19): Ampicillin, azathioprine, erythromycin lactobionate, hydralazine.IncompatibilityFluids (19): Not tested: Glucose 10%, glucose 5% in sodium chloride 0.9%, glucose 5% in sodium chloride 0.45%, sodium chloride 0.45%.Y-site (19): Amiodarone, calcium chloride, calcium gluconate, caspofungin, chlorpromazine, ciprofloxacin, dobutamine, erythromycin, esmolol, gentamicin, glycopyrrolate, haloperidol lactate, labetalol, magnesium sulfate, midazolam, pentamidine, phentolamine, promethazine, protamine, rocuronium, tobramycin.StabilityIV: Diluted solution is stable for 24 hours at 2–8°C Oral: As per Pharmacy Department.StorageAmpoule: Store below 25°C. Protect from light.		pancuronium, penicillin G, pentobarbital, phenobarbital, piperacillin, piperacillin-tazobactam,
remifentanil, sodium acetate, sodium bicarbonate, streptokinase, succinylcholine, theophylline, thiamine, thiopental, ticarcillin, ticarcillin-clavulanate, tolazoline, urokinase, vancomycin, vasopressin, vecuronium, verapamil, zidovudine.Variable compatibility (19): Ampicillin, azathioprine, erythromycin lactobionate, hydralazine.IncompatibilityFluids (19): Not tested: Glucose 10%, glucose 5% in sodium chloride 0.9%, glucose 5% in sodium chloride 0.45%, sodium chloride 0.45%.Y-site (19): Amiodarone, calcium chloride, calcium gluconate, caspofungin, chlorpromazine, ciprofloxacin, dobutamine, erythromycin, esmolol, gentamicin, glycopyrrolate, haloperidol lactate, labetalol, magnesium sulfate, midazolam, pentamidine, phentolamine, promethazine, protamine, rocuronium, tobramycin.StabilityIV: Diluted solution is stable for 24 hours at 2–8°C Oral: As per Pharmacy Department.StorageAmpoule: Store below 25°C. Protect from light.		potassium acetate, potassium chloride, procainamide, propofol, propranolol, pyridoxine, ranitidine,
thiamine, thiopental, ticarcillin, ticarcillin-clavulanate, tolazoline, urokinase, vancomycin, vasopressin, vecuronium, verapamil, zidovudine.Variable compatibility (19): Ampicillin, azathioprine, erythromycin lactobionate, hydralazine.IncompatibilityFluids (19): Not tested: Glucose 10%, glucose 5% in sodium chloride 0.9%, glucose 5% in sodium chloride 0.45%, sodium chloride 0.45%.Y-site (19): Amiodarone, calcium chloride, calcium gluconate, caspofungin, chlorpromazine, ciprofloxacin, dobutamine, erythromycin, esmolol, gentamicin, glycopyrrolate, haloperidol lactate, labetalol, magnesium sulfate, midazolam, pentamidine, phentolamine, promethazine, protamine, rocuronium, tobramycin.StabilityIV: Diluted solution is stable for 24 hours at 2–8°C Oral: As per Pharmacy Department.StorageAmpoule: Store below 25°C. Protect from light.		
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ciprofloxacin, dobutamine, erythromycin, esmolol, gentamicin, glycopyrrolate, haloperidol lactate, labetalol, magnesium sulfate, midazolam, pentamidine, phentolamine, promethazine, protamine, rocuronium, tobramycin.         Stability       IV: Diluted solution is stable for 24 hours at 2–8°C Oral: As per Pharmacy Department.         Storage       Ampoule: Store below 25°C. Protect from light.		
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Iabetalol, magnesium sulfate, midazolam, pentamidine, phentolamine, promethazine, protamine, rocuronium, tobramycin.         Stability       IV: Diluted solution is stable for 24 hours at 2–8°C Oral: As per Pharmacy Department.         Storage       Ampoule: Store below 25°C. Protect from light.		
rocuronium, tobramycin.         Stability       IV: Diluted solution is stable for 24 hours at 2–8°C         Oral: As per Pharmacy Department.         Storage       Ampoule: Store below 25°C. Protect from light.		
Stability       IV: Diluted solution is stable for 24 hours at 2–8°C         Oral: As per Pharmacy Department.         Storage       Ampoule: Store below 25°C. Protect from light.		
Oral: As per Pharmacy Department.       Storage     Ampoule: Store below 25°C. Protect from light.	Stability	
Storage         Ampoule: Store below 25°C. Protect from light.	Stability	
	Storage	
while others are stored refrigerated (2–8°C). Protect from light.	Fueinicate	
<b>Excipients</b> IV injections are brand specific, please refer to manufacturer's information.	Excipients	
DBL Pfizer: Sodium citrate dihydrate, Creatinine, Hydrochloric acid, Sodium hydroxide		
Mylan: Sodium citrate, creatinine and water for injections		
DBL Hospira: Sodium citrate dihydrate; disodium edetate; hydrochloric acid; sodium hydroxide; sodium		
sulfite.		
Alphapharm: Sodium citrate anhydrous and creatinine		Alphapharm: Sodium citrate anhydrous and creatinine
Oral preparations: Many preparations exist, please consult pharmacy. An example is shown below in		Oral preparations: Many preparations exist please consult pharmacy. An example is shown below in
special comments.		

Newborn use only

Special	IV dovomothogono proporation as a straight and advartations			
comments	IV dexamethasone preparation as a straight oral administration			
comments	A small study in healthy adults showed an absolute bioavailability of around 76% when dexamethasone sodium phosphate injection was administrated orally undiluted, and authors recommended a dose			
	adjustment. (15) No studies have been reported in neonates.			
	Extemporaneous ORAL preparation using IV dexamethasone (20	=		
	Oral dexamethasone 0.1 mg/mL suspension can be prepared in-	house by pharmacist:		
	Dexamethasone phosphate injection 4 mg/mL*	3 mL		
		48.5 mL		
		To 100 mL		
	Method: Draw up the required amount of injection and add to	a calibrated amber medicine bottle.		
	Gradually add the vehicles and mix thoroughly. Make up to fina	l volume of 100 mL with vehicle for		
	oral solution USP-NF.			
	Cautionary advisory label	SHAKE WELL BEFORE USE		
	Container	Amber bottle. Protect from light.		
	Storage	Store below 25 <sup>o</sup> C		
	Expiry	Up to 28 days from the date of		
		preparation		
	*1.2 mg dexamethasone phosphate is equivalent to 1 mg dexa	methasone base		
	Oral devemethacene 1 mg/mL suspension can be prepared in be	use by pharmasist:		
	Oral dexamethasone 1 mg/mL suspension can be prepared in-house by pharmacist:			
	Dexamethasone phosphate injection 4 mg/mL*	30 mL		
	Vehicle for oral suspension USP-NF e.g. Ora-Plus/Ora-Sweet	35 mL		
	Vehicle for oral suspension USP-NF e.g. Ora-Plus/ Ora-Sweet	To 100 mL		
	Vehicle for oral suspension USP-NF e.g. Ora-Plus/ Ora-Sweet Method: Draw up the required amount of injection and add to			
		a calibrated amber medicine bottle.		
	Method: Draw up the required amount of injection and add to Gradually add the vehicles and mix thoroughly. Make up to fina	a calibrated amber medicine bottle.		
	Method: Draw up the required amount of injection and add to Gradually add the vehicles and mix thoroughly. Make up to fina oral solution USP-NF.	a calibrated amber medicine bottle. Il volume of 100 mL with vehicle for		
	Method: Draw up the required amount of injection and add to Gradually add the vehicles and mix thoroughly. Make up to fina oral solution USP-NF. Cautionary advisory label	a calibrated amber medicine bottle. Il volume of 100 mL with vehicle for SHAKE WELL BEFORE USE		
	Method: Draw up the required amount of injection and add to Gradually add the vehicles and mix thoroughly. Make up to fina oral solution USP-NF. Cautionary advisory label Container	a calibrated amber medicine bottle. al volume of 100 mL with vehicle for SHAKE WELL BEFORE USE Amber bottle. Protect from light.		
	Method: Draw up the required amount of injection and add to Gradually add the vehicles and mix thoroughly. Make up to fina oral solution USP-NF. Cautionary advisory label Container Storage	a calibrated amber medicine bottle. al volume of 100 mL with vehicle for SHAKE WELL BEFORE USE Amber bottle. Protect from light. Store below 25°C		
	Method: Draw up the required amount of injection and add to Gradually add the vehicles and mix thoroughly. Make up to fina oral solution USP-NF. Cautionary advisory label Container Storage	a calibrated amber medicine bottle. al volume of 100 mL with vehicle for SHAKE WELL BEFORE USE Amber bottle. Protect from light. Store below 25°C Up to 28 days from the date of preparation		
	Method: Draw up the required amount of injection and add to Gradually add the vehicles and mix thoroughly. Make up to fina oral solution USP-NF. Cautionary advisory label Container Storage Expiry	a calibrated amber medicine bottle. al volume of 100 mL with vehicle for SHAKE WELL BEFORE USE Amber bottle. Protect from light. Store below 25°C Up to 28 days from the date of preparation		
	Method: Draw up the required amount of injection and add to Gradually add the vehicles and mix thoroughly. Make up to fina oral solution USP-NF. Cautionary advisory label Container Storage Expiry *1.2 mg dexamethasone phosphate is equivalent to 1 mg dexamethasone	a calibrated amber medicine bottle. al volume of 100 mL with vehicle for SHAKE WELL BEFORE USE Amber bottle. Protect from light. Store below 25°C Up to 28 days from the date of preparation		
Evidence	Method: Draw up the required amount of injection and add to         Gradually add the vehicles and mix thoroughly. Make up to fina         oral solution USP-NF.         Cautionary advisory label         Container         Storage         Expiry         *1.2 mg dexamethasone phosphate is equivalent to 1 mg dexamethasone         Efficacy:	a calibrated amber medicine bottle. al volume of 100 mL with vehicle for SHAKE WELL BEFORE USE Amber bottle. Protect from light. Store below 25°C Up to 28 days from the date of preparation methasone base		
Evidence	Method: Draw up the required amount of injection and add to         Gradually add the vehicles and mix thoroughly. Make up to fina         oral solution USP-NF.         Cautionary advisory label         Container         Storage         Expiry         *1.2 mg dexamethasone phosphate is equivalent to 1 mg dexamethasone         Efficacy:         Late (>7 days) postnatal corticosteroids for chronic lung disease	a calibrated amber medicine bottle. al volume of 100 mL with vehicle for SHAKE WELL BEFORE USE Amber bottle. Protect from light. Store below 25°C Up to 28 days from the date of preparation methasone base in preterm infants: Systematic review		
Evidence	Method: Draw up the required amount of injection and add to         Gradually add the vehicles and mix thoroughly. Make up to fina         oral solution USP-NF.         Cautionary advisory label         Container         Storage         Expiry         *1.2 mg dexamethasone phosphate is equivalent to 1 mg dexamethas phosphate is equivalent to 1 mg dexam	a calibrated amber medicine bottle. al volume of 100 mL with vehicle for SHAKE WELL BEFORE USE Amber bottle. Protect from light. Store below 25°C Up to 28 days from the date of preparation methasone base e in preterm infants: Systematic review associated with a reduction in neonate		
Evidence	Method: Draw up the required amount of injection and add to         Gradually add the vehicles and mix thoroughly. Make up to finatorial solution USP-NF.         Cautionary advisory label         Container         Storage         Expiry         *1.2 mg dexamethasone phosphate is equivalent to 1	a calibrated amber medicine bottle. al volume of 100 mL with vehicle for SHAKE WELL BEFORE USE Amber bottle. Protect from light. Store below 25°C Up to 28 days from the date of preparation methasone base e in preterm infants: Systematic review associated with a reduction in neonata at discharge, or at latest reported age		
Evidence	Method: Draw up the required amount of injection and add to         Gradually add the vehicles and mix thoroughly. Make up to fina         oral solution USP-NF.         Cautionary advisory label         Container         Storage         Expiry         *1.2 mg dexamethasone phosphate is equivalent to 1 mg dexamethasone of 21 RCTs (1424 participants) found late steroid treatment was mortality (at 28 days) but no reduction in mortality at 36 weeks, Benefits of delayed steroid treatment included reductions in failure	a calibrated amber medicine bottle. al volume of 100 mL with vehicle for SHAKE WELL BEFORE USE Amber bottle. Protect from light. Store below 25°C Up to 28 days from the date of preparation methasone base e in preterm infants: Systematic review associated with a reduction in neonata at discharge, or at latest reported age ure to extubate; chronic lung disease a		
Evidence	Method: Draw up the required amount of injection and add to         Gradually add the vehicles and mix thoroughly. Make up to fina         oral solution USP-NF.         Cautionary advisory label         Container         Storage         Expiry         *1.2 mg dexamethasone phosphate is equivalent to 1 mg dexamethasone phosphate is equivalent to 1 mg dexamethasone phosphate is equivalent to 1 mg dexamethasone of 21 RCTs (1424 participants) found late steroid treatment was mortality (at 28 days) but no reduction in mortality at 36 weeks, Benefits of delayed steroid treatment included reductions in fail         28 days and at 36 weeks' postmenstrual age; need for late rescu	a calibrated amber medicine bottle. al volume of 100 mL with vehicle for SHAKE WELL BEFORE USE Amber bottle. Protect from light. Store below 25°C Up to 28 days from the date of preparation methasone base e in preterm infants: Systematic review associated with a reduction in neonata at discharge, or at latest reported age ure to extubate; chronic lung disease a e treatment with dexamethasone;		
Evidence	Method: Draw up the required amount of injection and add to         Gradually add the vehicles and mix thoroughly. Make up to fina         oral solution USP-NF.         Cautionary advisory label         Container         Storage         Expiry         *1.2 mg dexamethasone phosphate is equivalent to 1 mg dexamethasone phosphate is equivalent to 1 mg dexamethasone phosphate is equivalent to 1 mg dexamethasone phosphate steroid treatment was mortality (at 28 days) but no reduction in mortality at 36 weeks, Benefits of delayed steroid treatment included reductions in fail         28 days and at 36 weeks' postmenstrual age; need for late rescu discharge on home oxygen; and death or chronic lung disease bothered	a calibrated amber medicine bottle. al volume of 100 mL with vehicle for SHAKE WELL BEFORE USE Amber bottle. Protect from light. Store below 25°C Up to 28 days from the date of preparation methasone base e in preterm infants: Systematic review associated with a reduction in neonata at discharge, or at latest reported age ure to extubate; chronic lung disease a e treatment with dexamethasone;		
Evidence	Method: Draw up the required amount of injection and add to         Gradually add the vehicles and mix thoroughly. Make up to fina         oral solution USP-NF.         Cautionary advisory label         Container         Storage         Expiry         *1.2 mg dexamethasone phosphate is equivalent to 1 mg dexamethasone phosphate is equivalent to 1 mg dexamethasone phosphate is equivalent to 1 mg desamethase         of 21 RCTs (1424 participants) found late steroid treatment was mortality (at 28 days) but no reduction in mortality at 36 weeks, Benefits of delayed steroid treatment included reductions in failing 28 days and at 36 weeks' postmenstrual age; need for late rescund ischarge on home oxygen; and death or chronic lung disease bor postmenstrual age.	a calibrated amber medicine bottle. a calibrated amber medicine bottle. I volume of 100 mL with vehicle for SHAKE WELL BEFORE USE Amber bottle. Protect from light. Store below 25°C Up to 28 days from the date of preparation methasone base e in preterm infants: Systematic review associated with a reduction in neonata at discharge, or at latest reported age ure to extubate; chronic lung disease a e treatment with dexamethasone; oth at 28 days of life and at 36 weeks'		
Evidence	Method: Draw up the required amount of injection and add to         Gradually add the vehicles and mix thoroughly. Make up to finatoral solution USP-NF.         Cautionary advisory label         Container         Storage         Expiry         *1.2 mg dexamethasone phosphate is equivalent to 1 mg dexamethasone phosphate is equivalent to 1 mg dexamethasone phosphate is equivalent to 1 mg dexamethasone phosphate is environment.         Efficacy:         Late (>7 days) postnatal corticosteroids for chronic lung disease of 21 RCTs (1424 participants) found late steroid treatment was mortality (at 28 days) but no reduction in mortality at 36 weeks, Benefits of delayed steroid treatment included reductions in fail 28 days and at 36 weeks' postmenstrual age; need for late rescu discharge on home oxygen; and death or chronic lung disease bo postmenstrual age.         There was no significant difference in infection, gastrointestinal	a calibrated amber medicine bottle. a calibrated amber medicine bottle. I volume of 100 mL with vehicle for SHAKE WELL BEFORE USE Amber bottle. Protect from light. Store below 25°C Up to 28 days from the date of preparation methasone base e in preterm infants: Systematic review associated with a reduction in neonata at discharge, or at latest reported age ure to extubate; chronic lung disease a e treatment with dexamethasone; oth at 28 days of life and at 36 weeks' bleeding or necrotising enterocolitis.		
Evidence	Method: Draw up the required amount of injection and add to         Gradually add the vehicles and mix thoroughly. Make up to finatoral solution USP-NF.         Cautionary advisory label         Container         Storage         Expiry         *1.2 mg dexamethasone phosphate is equivalent to 1 mg dexamethasone phosphate is equivalent to 1 mg dexamethasone phosphate is equivalent to 1 mg dexamethasone phosphate is environment of the steroid treatment was mortality (at 28 days) but no reduction in mortality at 36 weeks, Benefits of delayed steroid treatment included reductions in fail 28 days and at 36 weeks' postmenstrual age; need for late rescuid discharge on home oxygen; and death or chronic lung disease bor postmenstrual age.         There was no significant difference in infection, gastrointestinal Adverse effects included hyperglycaemia, glycosuria, and hypert	a calibrated amber medicine bottle. a calibrated amber medicine bottle. al volume of 100 mL with vehicle for SHAKE WELL BEFORE USE Amber bottle. Protect from light. Store below 25°C Up to 28 days from the date of preparation methasone base e in preterm infants: Systematic review associated with a reduction in neonata at discharge, or at latest reported age ure to extubate; chronic lung disease a e treatment with dexamethasone; oth at 28 days of life and at 36 weeks' bleeding or necrotising enterocolitis. ension, an increase in severe		
Evidence	Method: Draw up the required amount of injection and add to         Gradually add the vehicles and mix thoroughly. Make up to finational solution USP-NF.         Cautionary advisory label         Container         Storage         Expiry         *1.2 mg dexamethasone phosphate is equivalent to 1 mg dexamethasone phosphate is equivalent to 1 mg dexamethasone phosphate is equivalent to 1 mg dexamethasone phosphate is environment of the steroid treatment was mortality (at 28 days) but no reduction in mortality at 36 weeks, Benefits of delayed steroid treatment included reductions in failing 28 days and at 36 weeks' postmenstrual age; need for late rescund ischarge on home oxygen; and death or chronic lung disease bor postmenstrual age.         There was no significant difference in infection, gastrointestinal Adverse effects included hyperglycaemia, glycosuria, and hypert retinopathy of prematurity but no significant increase in blindne	a calibrated amber medicine bottle. a calibrated amber medicine bottle. al volume of 100 mL with vehicle for SHAKE WELL BEFORE USE Amber bottle. Protect from light. Store below 25°C Up to 28 days from the date of preparation methasone base e in preterm infants: Systematic review associated with a reduction in neonata at discharge, or at latest reported age ure to extubate; chronic lung disease a e treatment with dexamethasone; oth at 28 days of life and at 36 weeks' bleeding or necrotising enterocolitis. ension, an increase in severe ss. The combined rate of death or		
Evidence	Method: Draw up the required amount of injection and add to         Gradually add the vehicles and mix thoroughly. Make up to finatoral solution USP-NF.         Cautionary advisory label         Container         Storage         Expiry         *1.2 mg dexamethasone phosphate is equivalent to 1 mg dexamethasone of 21 RCTs (1424 participants) found late steroid treatment was mortality (at 28 days) but no reduction in mortality at 36 weeks, Benefits of delayed steroid treatment included reductions in faile 28 days and at 36 weeks' postmenstrual age; need for late rescu discharge on home oxygen; and death or chronic lung disease bot postmenstrual age.         There was no significant difference in infection, gastrointestinal Adverse effects included hyperglycaemia, glycosuria, and hypert retinopathy of prematurity but no significant increase in blindne cerebral palsy, major neurosensory disability, and the combined	a calibrated amber medicine bottle. a calibrated amber medicine bottle. al volume of 100 mL with vehicle for SHAKE WELL BEFORE USE Amber bottle. Protect from light. Store below 25°C Up to 28 days from the date of preparation methasone base e in preterm infants: Systematic review associated with a reduction in neonata at discharge, or at latest reported age ure to extubate; chronic lung disease a e treatment with dexamethasone; oth at 28 days of life and at 36 weeks' bleeding or necrotising enterocolitis. ension, an increase in severe ss. The combined rate of death or rate of death or major neurosensory		
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Evidence	Method: Draw up the required amount of injection and add to         Gradually add the vehicles and mix thoroughly. Make up to finatoral solution USP-NF.         Cautionary advisory label         Container         Storage         Expiry         *1.2 mg dexamethasone phosphate is equivalent to 1 mg dexamethasone of 21 RCTs (1424 participants) found late steroid treatment was mortality (at 28 days) but no reduction in mortality at 36 weeks, Benefits of delayed steroid treatment included reductions in faile 28 days and at 36 weeks' postmenstrual age; need for late rescu discharge on home oxygen; and death or chronic lung disease bot postmenstrual age.         There was no significant difference in infection, gastrointestinal Adverse effects included hyperglycaemia, glycosuria, and hypert retinopathy of prematurity but no significant increase in blindne cerebral palsy, major neurosensory disability, and the combined	a calibrated amber medicine bottle. a calibrated amber medicine bottle. I volume of 100 mL with vehicle for SHAKE WELL BEFORE USE Amber bottle. Protect from light. Store below 25°C Up to 28 days from the date of preparation methasone base e in preterm infants: Systematic review associated with a reduction in neonata at discharge, or at latest reported age ure to extubate; chronic lung disease a e treatment with dexamethasone; oth at 28 days of life and at 36 weeks' bleeding or necrotising enterocolitis. ension, an increase in severe ss. The combined rate of death or rate of death or major neurosensory ces in later childhood outcomes for wer participants had a clinically		

A meta-regression of randomised trials of postnatal corticosteroids in preterm infants found a relationship between risk of chronic lung disease and risk of death or CP. With risks for CLD below 35%, corticosteroid treatment significantly increased the chance of death or CP, whereas with risks for CLD exceeding 65%, it reduced this chance. There was no difference overall in risk of death or cerebral palsy. The analysis suggests postnatal corticosteroids should be restricted to ventilated infants predicted to have $\geq$ 50% risk of chronic lung disease. (10, 11) (LOE III, GOR C) Conclusion: The benefits of late corticosteroid therapy may not outweigh actual or potential adverse effects. (1) It is recommended to reserve the use of late corticosteroids for infants who cannot be weaned from mechanical ventilation and are at $\geq$ 50% risk of chronic lung disease.
<b>Early (&lt; 8 days) postnatal corticosteroids for preventing chronic lung disease in preterm infants:</b> Early corticosteroid treatment facilitates extubation and reduces the risk of chronic lung disease, patent ductus arteriosus and severe retinopathy of prematurity. However, it causes short-term adverse effects including gastrointestinal bleeding, intestinal perforation, hyperglycaemia, hypertension, hypertrophic cardiomyopathy and growth failure. Long-term follow-up studies report an increased risk of abnormal neurological examination and cerebral palsy. There was no difference in infection. The benefits of early postnatal corticosteroid treatment, particularly dexamethasone, may not outweigh the adverse effects of this treatment. (12) (LOE I, GOR B)
<b>Systemic corticosteroid regimens for preventing chronic lung disease in preterm infants:</b> A systematic review of systemic corticosteroid regimens included 14 studies. (13) Eight compared total cumulative doses of dexamethasone: Low = less than 2 mg/kg; moderate = 2 to 4 mg/kg; and high = greater than 4 mg/kg.
Moderate dexamethasone dose versus a low-dosage regimen: There was no difference in death and BPD (RR 0.83, 95% CI 0.50 to 1.40; 154 infants, 4 RCTs), or death or cerebral palsy (RR 0.78, 95% CI 0.28 to 2.18; 109 infants, 2 RCTs). Moderate dexamethasone dose versus a high-dosage regimen: meta-analysis found an increased risk of
BPD at 36 weeks PMA (RR 1.50, 95% CI 1.01 to 2.22; RD 0.26, 95% CI 0.03 to 0.49; NNTH 4, 95% CI 1.9 to 23.3; I2 = 0%, 2 studies, 55 infants), and increased risk of abnormal neurodevelopmental outcome (RR 8.33, 95% CI 1.63 to 42.48; RD 0.30, 95% CI 0.14 to 0.46; NNTH 4, 95% CI 2.2 to 7.3; I2 = 68%, 2 studies, 74 infants) when using a moderate cumulative-dosage regimen. Composite outcomes of death or BPD (RR 1.35, 95%CI 1.00 to 1.82; 55 infant, 2 RCTs) and death or abnormal neurodevelopmental outcome (RR 3.37, 95% CI 1.42 to 7.99; 81 infants, 2 RCTs) were increased in the moderate compared to the higher dose regimen. Four studies (762 infants) of early initiation of dexamethasone therapy versus a moderately early or delayed initiation found no significant differences in the primary outcomes. Two RCTs (197 infants) of continuous versus a pulse dexamethasone regimen found an increased risk of the combined outcome death or BPD when using the pulse therapy. Two RCTs (109 infants) investigating a standard regimen versus a participant-individualized course of dexamethasone showed no difference in the primary outcome and long-term neurodevelopmental outcomes.
<b>The low dose dexamethasone protocol (DART trial)</b> facilitated extubation and shortened duration of intubation in ventilator-dependent, very preterm/extremely low birth weight infants, without obvious short-term complications. [Twice-daily doses of a 10-day tapering course of dexamethasone sodium phosphate (0.15 mg/kg per day for 3 days, 0.10 mg/kg per day for 3 days, 0.05 mg/kg per day for 2 days, and 0.02 mg/kg per day for 2 days; total cumulative dose = 0.89 mg/kg)]. (14)
<b>High dose trials:</b> RCT by Cummings at al included 36 ventilator dependent preterm infants of GA < 30 weeks. They randomly received dexamethasone for 42 days (n=13) or 18 days (n=12) or placebo (n=110). Infants in the 42-day dexamethasone group were weaned from the mechanical ventilator faster than the 18-day group and the placebo group. Hyperglycaemia, occult gastric bleed, suspected or proven sepsis and retinopathy of prematurity rates in the 42-day groups were not different from the control group. Need for red cell transfusion was lower in the 42 days group. Similarly, normal neurological examination and Bayley developmental indices >84 at 15 months of age were higher in the

	42-day group (78%) compared to the 18 day group (22%) and the placebo group (40%). (3) Papile et al
	randomised 371 ventilator dependent very low birth weight infants to receive a 2 week course of
	dexamethasone (cumulative dose: 3.25 mg/kg) at either 14 days or 28 days. There was no difference in
	the risk of death before discharge or development of chronic lung disease between the two regimens.
	But nosocomial infections and hyperglycaemia were higher in infants who received dexamethasone at
	14 days while the mean arterial blood pressure was higher in infants who received dexamethasone at
	28 days.(5) Marr et al J randomised 59 infants of postnatal age of 10-21 days born at <27 weeks of
	gestation and evolving chronic lung disease (Ventilator support, mean airway pressure > 8 cm H <sub>2</sub> O and
	$FiO_2 > 60\%$ ) were randomised to receive either 42-day (n= 30) or 9-day dexamethasone course (n=29).
	Nineteen of 29 infants (66%) in the 9-day group received only 1 course of dexamethasone. During the
	study period, infants in the 42-day group received a total dexamethasone dose of 7.98 mg/kg. Infants in
	the 9-day group received a total dexamethasone dose of 2.63, 5.25, or 7.88 mg/kg depending upon the
	number of 9-day courses (1, 2, or 3) received. Infants in the 42-day group had shorter duration of
	ventilation (25 vs 37 days) and received fewer blood transfusions (2 vs 3.5) Intact survival at school age
	was significantly increased in the 42-day group (75%) compared with the 9-day group (34%).(4)
	was significantly increased in the 42 day group (75%) compared with the 5 day group (54%).(4)
	Intravenous dexamethasone for extubation of newborn infants: Dexamethasone reduces the need for
	endotracheal reintubation of neonates after a period of intermittent positive pressure ventilation. In
	view of the lack of effect in low-risk infants and the documented and potential side effects, restrict use
	to infants at increased risk for airway oedema and obstruction, such as those who have received
	repeated or prolonged intubations. Dose regimens used 0.25-0.5 mg/kg from 1-3 doses. (6) [LOE I, GOR
	C]
	Side effects:
	Late ( $\geq$ 7 days) postnatal corticosteroid use was associated with no significant difference in infection,
	gastrointestinal bleeding, or necrotising enterocolitis, but adverse effects included hyperglycaemia, glycosuria, and hypertension, an increase in severe retinopathy of prematurity but no significant
	increase in blindness. (1) [LOE I]
	Early (< 7 days) postnatal corticosteroid use was associated with gastrointestinal bleeding, intestinal
	perforation, hyperglycaemia, hypertension, hypertrophic cardiomyopathy and growth failure. Long-
	term follow-up studies report an increased risk of abnormal neurological examination and cerebral
	palsy. (12) [LOE I]
	Adrenal suppression and myocardial hypertrophy: Higher doses (starting > 0.2 mg/kg) and prolonged
	courses (> 14 days) may be associated with myocardial hypertrophy and adrenal suppression. (15, 16)
	(LOE II, GOR B)
	Infection: Systematic reviews of trials of early and late postnatal corticosteroids found no difference in
	infection rate overall. (1, 12, 13) However, a crossover trial of dexamethasone-placebo versus placebo-
	dexamethasone reported increased nosocomial infection in the initial period in the dexamethasone
	group. (5)
	Neutrophils: Dexamethasone increased total and immature neutrophils and platelet count peaking on
	day 7. (17) Hypertriglyceridaemia: Dexamethasone induces hypertriglyceridemia in association with
	hyperinsulinism and raised free fatty acids. (18)
Practice points	Recommendations on the optimal type of corticosteroid, the optimal dosage, or the optimal timing of
	initiation for the prevention of BPD in preterm infants cannot be made based on current level of
	evidence. (13)
	The benefits of early (before 7 days) corticosteroids may not outweigh the harms so cannot be
	recommended. (12, 13) [LOE I, GOR C]
	It is recommended to reserve the use of late (≥ 7 days) corticosteroids for infants who cannot be
	weaned from mechanical ventilation and are at $\geq$ 50% risk of chronic lung disease. (1, 10, 11, 13) [LOE I,
	GOR C].
	There is insufficient evidence to recommend a participant-individualized course of dexamethasone for
	infants. (13)
	Parents should be informed of the potential benefits and harms of postnatal corticosteroid treatment.

Newborn use only

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