

Indometacin (Indomethacin)

Newborn use only

2020

Alert	From April 2016, the international spelling for Indomethacin has been changed to Indometacin.			
Indication	Closure of patent ductus arteriosus (PDA) Prevention of severe intra-ventricular haemorrhage.			
Action	Prostaglandin inhibitor. Prostaglandins are important in maintaining ductal patency in utero.			
Drug type	Non-steroidal anti-inflammatory drug (NSAID).			
Trade name	Indocid PDA, Indomethacin Agila			
Presentation	1 mg powder for reconstitution.			
Dose	IV Single daily dose as follows:			
	Post-natal Age	Day 1	Day 2	Day 3
	≤ 48 hours	0.2 mg/kg/dose	0.1 mg/kg/dose	0.1 mg/kg/dose
	> 48 hours	0.2 mg/kg/dose	0.2 mg/kg/dose	0.2 mg/kg/dose
Dose adjustment Therapeutic hypothermia ECMO Renal impairment Hepatic impairment	Not applicable Insufficient data to suggest dose adjustments. Refer to contraindications section. Insufficient data to suggest dose adjustments.			
Maximum dose	0.2 mg/kg			
Total cumulative dose	0.6 mg/kg			
Route	IV			
Preparation	Add 1 mL of WFI to the 1 mg powder for reconstitution. Then draw up 1 mL (1 mg) and add 9 mL WFI to make a final volume of 10 mL with a concentration of 0.1 mg/mL.			
Administration	IV: Over 20--30 minutes. Inspect visually for particulate matter and discolouration prior to administration.			
Monitoring	Monitor urine output, cardiovascular status, serum biochemistry, renal function and for signs of bleeding.			
Contraindications	Serious infection, active bleeding, thrombocytopenia or coagulopathy, necrotising enterocolitis (NEC) or intestinal perforation, significant renal dysfunction, ductal dependent congenital heart disease and pulmonary hypertension.			
Precautions	Indomethacin is associated with transient renal impairment. Late and prolonged treatment of the ductus arteriosus with indomethacin may increase the incidence of NEC.			
Drug interactions	Aminoglycosides: Dose may need to be modified if indomethacin affects renal function. Digoxin: Reduces indomethacin volume of distribution – increased dose may be required. Diuretics: Use of frusemide in combination with indomethacin may increase the incidence of renal impairment. Systemic corticosteroids: Intestinal perforation has been described in infants treated with early dexamethasone and indomethacin.			
Adverse reactions	Prophylactic indomethacin is associated with oliguria/anuria. Treatment of the ductus arteriosus with indomethacin and prolonged courses of indomethacin are associated with NEC. Gastrointestinal perforation and possibly bleeding. Extravasation.			
Compatibility	Fluids: Sodium chloride 0.9%, water for injection. Y site: Atropine, Cephazolin, cefotaxime, ceftazidime, clindamycin, dexamethasone, digoxin, fentanyl, fluconazole, frusemide, heparin, hydrocortisone, benzylpenicillin, potassium chloride, sodium bicarbonate.			
Incompatibility	Fluids: Glucose 7.5%, Glucose 10% Y-site: Amino acid solutions, adrenaline, amikacin, atracurium, aztreonam, benztropine, buprenorphine, calcium chloride, calcium gluconate, chlorpromazine, dobutamine, dopamine, erythromycin, esmolol, gentamicin, glycopyrrolate, haloperidol lactate, hydralazine, labetalol, magnesium sulfate, metaraminol, midazolam, morphine sulfate, noradrenaline, ondansetron, pentamidine, pethidine, phenylephrine, promethazine, protamine, suxamethonium, tobramycin, vancomycin, vasopressin, verapamil.			
Stability	Discard unused portion. Diluted solution is stable for 6 hours at room temperature.			

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Storage	Store unopened vials at room temperature (20–25°C)
Excipients	
Special comments	
Evidence	Refer to full version.
Practice points	
References	Refer to full version.

VERSION/NUMBER	DATE
Original	29/09/2015
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