<table>
<tr><td>Alert</td><td>Nil</td></tr>
<tr><td>Indication</td><td>Closure of patent ductus arteriosus (PDA)
Prevention of severe intra-ventricular haemorrhage.</td></tr>
<tr><td>Action</td><td>Prostaglandin inhibitor. Prostaglandins are important in maintaining ductal patency in utero.</td></tr>
<tr><td>Drug Type</td><td>Non-steroidal anti-inflammatory drug (NSAID).</td></tr>
<tr><td>Trade Name</td><td>Indocid PDA, Indomethacin Agila</td></tr>
<tr><td>Presentation</td><td>1 mg powder for reconstitution.</td></tr>
<tr><td>Dosage/Interval</td><td>
<table>
<tr><td>Post-natal Age</td><td>Day 1</td><td>Day 2</td><td>Day 3</td></tr>
<tr><td>≤ 48 hours</td><td>0.2 mg/kg/dose</td><td>0.1 mg/kg/dose</td><td>0.1 mg/kg/dose</td></tr>
<tr><td>> 48 hours</td><td>0.2 mg/kg/dose</td><td>0.2 mg/kg/dose</td><td>0.2 mg/kg/dose</td></tr>
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</td></tr>
<tr><td>Maximum daily dose</td><td>0.2 mg/kg</td></tr>
<tr><td>Total cumulative dose</td><td>0.6 mg/kg</td></tr>
<tr><td>Route</td><td>IV</td></tr>
<tr><td>Preparation/Dilution</td><td>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.</td></tr>
<tr><td>Administration</td><td>IV: Over 20–-30 minutes.

Inspect visually for particulate matter and discolouration prior to administration.</td></tr>
<tr><td>Monitoring</td><td>Monitor urine output, cardiovascular status, serum biochemistry, renal function and for signs of bleeding.</td></tr>
<tr><td>Contraindications</td><td>Serious infection, active bleeding, thrombocytopenia or coagulopathy, necrotising enterocolitis (NEC) or intestinal perforation, significant renal dysfunction, ductal dependent congenital heart disease and pulmonary hypertension.</td></tr>
<tr><td>Precautions</td><td>Indometacin is associated with transient renal impairment. Late and prolonged treatment of the ductus arteriosus with indometacin may increase the incidence of NEC.</td></tr>
<tr><td>Drug Interactions</td><td>Aminoglycosides: Dose may need to be modified if indometacin affects renal function.
Digoxin: Reduces indometacin volume of distribution – increased dose may be required.
Diuretics: Use of frusemide in combination with indometacin may increase the incidence of renal impairment.
Systemic corticosteroids: Intestinal perforation has been described in infants treated with early dexamethasone and indometacin.</td></tr>
<tr><td>Adverse Reactions</td><td>Prophylactic indometacin is associated with oliguria/anuria.
Treatment of the ductus arteriosus with indometacin and prolonged courses of indometacin are associated with NEC.
Gastrointestinal perforation and possibly bleeding.
Extravasation.</td></tr>
<tr><td>Compatibility</td><td>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.</td></tr>
<tr><td>Incompatibility</td><td>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.</td></tr>
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Stability	Discard unused portion. Diluted solution is stable for 6 hours at room temperature.
Storage	Store unopened vials at room temperature (20−25°C)
Special Comments	Nil
Evidence summary	As per NMF Consensus Group. Refer to reference manual or electronic version.
References	As per NMF Consensus Group. Refer to reference manual or electronic version.

Original version Date: 29/09/2015	**Author: Neonatal Medicines Formulary Consensus Group**
Current Version number: 1.1	**Current Version Date: 10/11/2016**
Risk Rating: Medium	**Due for Review: 26/02/2021**
Approval by: JHCH CQ&PCC	**Approval Date: 26/02/2019**