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:

<table>
<thead>
<tr>
<th>Post-natal Age</th>
<th>Day 1</th>
<th>Day 2</th>
<th>Day 3</th>
</tr>
</thead>
<tbody>
<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>
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<tr>
<td>&gt; 48 hours</td>
<td>0.2 mg/kg/dose</td>
<td>0.2 mg/kg/dose</td>
<td>0.2 mg/kg/dose</td>
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</tbody>
</table>

Dose adjustment
Therapeutic hypothermia
Not applicable

ECMO
Insufficient data to suggest dose adjustments.

Renal impairment
Refer to contraindications section.

Hepatic impairment
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 fruseneide 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, ceftaxime, ceftazidime, clindamycin, dexamethasone, digoxin, fentanyl, fluconazole, fruseneide, heparin, hydrocortisone, benzylpenicillin, potassium chloride, sodium bicarbonate.

Incompatibility
Fluids: Glucose 7.5%, Glucose 10%
Y-site: Amino acid solutions, adrenaline, amikacin, atracurium, aztreonam, benztrapine, buprenorphine, calcium chloride, calcium gluconate, chlorpromazine, dobutamine, dopamine, erythromycin, esmolol, gentamicin, glycopyrrolate, haloperidol lactate, hydralazine, labeltalol, magnesium sulfate, metaraminol, midazolam, morphine sulfate, noradrenaline, ondansetron, pentamidine, pethidine, phenylephrine, promethazine, protamine, suxamethonum, tobramycin, vancomycin, vasopressin, verapamil.

Stability
Discard unused portion. Diluted solution is stable for 6 hours at room temperature.
Indometacin (Indomethacin)
Newborn use only

**Storage**
Store unopened vials at room temperature (20–25°C)

**Excipients**

**Special comments**

**Evidence**
Refer to full version.

**Practice points**
Refer to full version.

### VERSION/NUMBER | DATE
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Original | 29/09/2015
Revised 1.2 | 25/12/2016
Current 1.3 | 20/07/2020
REVIEW (5 years) | 20/07/2025

### Authors Contribution

<table>
<thead>
<tr>
<th>Original author/s</th>
<th>Evidence Review</th>
<th>Expert review</th>
<th>Nursing Review</th>
<th>Pharmacy Review</th>
<th>ANMF Group contributors</th>
<th>Final editing and review of the original</th>
<th>Electronic version</th>
<th>Facilitator</th>
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<tbody>
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<td>David Osborn, Tim Schindler</td>
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<td>Mariella De Rosa, Ushma Trivedi</td>
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<td>Ian Whyte</td>
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