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| **Piperacillin/Tazobactam** | | | | | |
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| **INDICATION:** | A bactericidal ureidopenicillin combined with a beta-lactamase inhibitor. It has a broad spectrum (including anaerobic) of activity. It can be used in combination with vancomycin for late onset infections and NEC. **Remember fungal prophylaxis.** | | | | |
| DOSE RANGE  |  |  |  |  | | --- | --- | --- | --- | | **AGE** | **DOSE** | **FREQUENCY** | **ROUTE** | | Infants less than one month of age | 90mg/kg | Every 8 hours | IV infusion over 30minutes | | Infants from one month of age | 90mg/kg | Every 6 hours | IV infusion over 30minutes |   **Review dosage in moderate to severe renal failure**  **FORM** Vial containing piperacillin 2g with tazobactam 0.25g (2.25g) per vial. Dry  powder for reconstitution. | | | | | |
| **RECONSTITUTION** | | Add 13.4ml water for injection to a 2.25g vial to give a 150mg/ml solution.  **It must be further diluted as follows before use.** | | | |
| **DILUTION** | | |  |  | | --- | --- | | Piperacillin/tazobactam 150mg/ml | 3ml | | Dilute with 2ml of sodium chloride 0.9% | Up to 5ml total |   Gives a 90mg in 1ml solution. Use the required volume. | | | |
| **METHOD OF ADMINISTRATION** | | Infusion over 30 mins | | | |
| **COMPATIBILITY**   |  |  | | --- | --- | | **Solution compatibility** | Sodium Chloride 0.9%, Glucose 5%, Glucose 10% (no stability data but risk of using is low when there is stability data for Glucose 5%) | | **Solution incompatibility** | No data available | | **IV drug compatibility** | Fluconazole, Metronidazole | | **IV drug incompatibility** | Aciclovir, Aminoglycosides, Amphotericin, Dobutamine, Ganciclovir, Sodium Bicarbonate, Sodium lactate compound, Vancomycin |   **THIS LIST IS NOT EXHAUSTIVE PLEASE CONTACT PHARMACY FOR FURTHER INFORMATION ON COMPATIBILITY WITH ANY MEDICINES NOT INCLUDED** | | | | | |
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| **SPECIAL MONITORING REQUIREMENTS** | | Observe for hypersensitivity reactions and vein irritation (phlebitis and thrombophlebitis). | | | |
| **FURTHER INFORMATION** | |  | | | |
| **Cautions/ Contraindications** | | Always check for previous hypersensitivity reactions to penicillin’s, cephalosporins and other allergens before starting therapy.  Caution in renal impairment – adjustment to dosing frequency may be needed in moderate and severe impairment.  Interaction with vecuronium may cause prolongation of the neuromuscular blockade | | | |
| **Side effects** | | Diarrhoea (stop if persistent as pseudo-membranous colitis can occur), nausea, vomiting, candida infection, thrombocytopenia, anaemia, leucopoenia, neutropenia, hypokalaemia, hypotension, seizures, rash, abnormal LFTs, bleeding manifestations. | | | |
| **Storage** | | Use reconstituted intravenous solution immediately, do not store. The unopened vials are stored in the IV drug cupboard. Do not use if solution is not clear or has particles. | | | |
| **Applicable Links** | | [Summary of Product Characteristics (SPC)](file:///\\rie-app1\shared\Pharmacy%20Data%20Area\Clinical%20Pharmacists\Clinical%20Pharmacists\Neonatal%20&%20Womens%20Services\Neonatal\Monographs\NNU%202023%20MONOGRAPH%20REVIEW\Updated%20NNU%20monographs%20Ready%20for%20Final%20Approval%20at%20NNU%20group\Summary%20of%20Product%20Characteristics%20(SPC)) | | | |
|  | | [BNFc](file:///\\rie-app1\shared\Pharmacy%20Data%20Area\Clinical%20Pharmacists\Clinical%20Pharmacists\Neonatal%20&%20Womens%20Services\Neonatal\Monographs\NNU%202023%20MONOGRAPH%20REVIEW\Caroline\BNFc) | | | |
| Prepared by | | | Maggie Davidson | Checked by | Caroline O’Hare |
| Date approved by NNU Pharmacy Group | | | May 2023 | Review Date | May 2026 |

**Administer reconstituted solutions immediately.**

**All vials, ampoules and infusion bags are for single use only unless otherwise stated.**

Dose may vary depending on indication, age, renal function, hepatic function, and concomitant medications.

This monograph should be used in conjunction with the package insert, BNF for Children, and Summary of Product Characteristics. For further advice contact your clinical pharmacist or pharmacy department.