

新生兒抗生素劑量表 Neonatal Antibiotics Dosage Schedules

20220206 修訂
20250805 二版

| | | Body weight <1kg | 1-2kg | >2kg |
|--|---------|------------------|---------------|---------------|
| Amoxicillin 500mg+ Clavulanic acid 100mg (Soonmelt): the dose is based on TOTAL drug not the amoxicillin component Oral: Age ≥7days 30mg/kg/dose q8h IV: 30mg/kg/dose, PMA≤ 37weeks Q12H; PMA 37-44weeks Age≤ 6days Q12H, Age ≥7days Q8H | | | | |
| Oxacillin: general infection | | | | |
| | Age≤7d | 25 mg/kg Q12H | 25 mg/kg Q12H | 25 mg/kg Q8H |
| | 8-14 d | 25 mg/kg Q12H | 25 mg/kg Q8H | 25 mg/kg Q6H |
| | 15-28 d | 25 mg/kg Q8H | 25 mg/kg Q8H | 25 mg/kg Q6H |
| Oxacillin: meningitis | | | | |
| | Age≤7d | 50 mg/kg Q12H | 50 mg/kg Q12H | 50 mg/kg Q8H |
| | 8-14 d | 50 mg/kg Q12H | 50 mg/kg Q8H | 50 mg/kg Q6H |
| | 15-28 d | 50 mg/kg Q8H | 50 mg/kg Q8H | 50 mg/kg Q6H |
| Cefazolin: general infection | | | | |
| | Age≤7d | 25 mg/kg Q12H | 25 mg/kg Q12H | 50 mg/kg Q12H |
| | 8-14 d | 25 mg/kg Q8H | 25 mg/kg Q8H | 50 mg/kg Q8H |
| | 15-28 d | 25 mg/kg Q8H | 25 mg/kg Q8H | 50 mg/kg Q8H |
| Cefotaxime (Claforan): general infection (100-150 mg/kg/day) | | | | |
| | Age≤7d | 50 mg/kg Q12H | 50 mg/kg Q12H | 50 mg/kg Q12H |
| | 8-14 d | 50 mg/kg Q12H | 50 mg/kg Q8H | 50 mg/kg Q8H |
| | 15-28 d | 50 mg/kg Q8H | 50 mg/kg Q8H | 50 mg/kg Q8H |
| Cefotaxime: meningitis ; 200 mg/kg/day ; interval 比照上述表格所示 (參考馬偕)。 Meningitis: use smaller doses and longer intervals for neonates <2 kg (參考 Neofax) Age≤7days 100-150mg/kg/day Q12-Q8H 8-28 days 150-200mg/kg/day Q8H-Q6H | | | | |
| Ceftriaxone (Cefin): Sepsis: Use <u>cefotaxime</u> in place of ceftriaxone if hyperbilirubinemia or receiving calcium-containing intravenous solutions | | | | |
| | | Body weight <1kg | 1-2kg | >2kg |
| | Age≤7d | 50 mg/kg QD | 50 mg/kg QD | 50 mg/kg QD |
| | 8-14 d | 50 mg/kg QD | 50 mg/kg QD | 50 mg/kg QD |
| | 15-28 d | 50 mg/kg QD | 50 mg/kg QD | 75 mg/kg QD |
| Ceftriaxone: meningitis: In neonates, IDSA guidelines suggest cefotaxime as the preferred nonpseudomonal third-generation cephalosporin; no ceftriaxone dosing is provided in the guidelines. | | | | |
| Ceftazidime (CetaZINE): general infection | | | | |
| | Age≤7d | 50 mg/kg Q12H | 50 mg/kg Q12H | 50 mg/kg Q12H |
| | 8-14 d | 50 mg/kg Q12H | 50 mg/kg Q8H | 50 mg/kg Q8H |
| | 15-28 d | 50 mg/kg Q8H | 50 mg/kg Q8H | 50 mg/kg Q8H |
| Ceftazidime: Meningitis: use smaller doses and longer intervals for neonates <2 kg Age≤ 7days 100-150 mg/kg/day divided Q12-Q8H | | | | |

| 8-28 days 150 mg/kg/day divided Q8H | | | | |
|--|---------|----------------------------|----------------|----------------|
| | Age≤7d | 50 mg/kg Q12H | 50 mg/kg Q12H | 50 mg/kg Q12H |
| | 8-14 d | 50 mg/kg Q8H | 50 mg/kg Q8H | 50 mg/kg Q8H |
| | 15-28 d | 50 mg/kg Q8H | 50 mg/kg Q8H | 50 mg/kg Q8H |
| Piperacillin 2G+ Tazobactam 0.25G (Tapimycin): Dose base on piperacillin component | | | | |
| | Age≤7d | 100 mg/kg Q12H | 100 mg/kg Q12H | 100 mg/kg Q8H |
| | 8-14 d | 100 mg/kg Q12H | 100 mg/kg Q8H | 80 mg/kg Q6H |
| | 15-28 d | 100 mg/kg Q8H | 100 mg/kg Q8H | 80 mg/kg Q6H |
| Meropenem: general infection | | | | |
| | Age≤7d | 20 mg/kg Q12H | 20 mg/kg Q12H | 20 mg/kg Q8H |
| | 8-14 d | 20 mg/kg Q12H | 20 mg/kg Q8H | 30 mg/kg Q8H |
| | 15-28 d | 20 mg/kg Q8H | 20 mg/kg Q8H | 30 mg/kg Q8H |
| Meropenem: meningitis | | | | |
| | Age≤7d | 40 mg/kg Q12H | 40 mg/kg Q12H | 40 mg/kg Q8H |
| | 8-14 d | 40 mg/kg Q12H | 40 mg/kg Q8H | 40 mg/kg Q8H |
| | 15-28 d | 40 mg/kg Q8H | 40 mg/kg Q8H | 40 mg/kg Q8H |
| Clindamycin: general infection dose 5 mg/kg/dose; infusion > 30-60min | | | | |
| | Age≤7d | 5 mg/kg Q12H | 5 mg/kg Q12H | 5 mg/kg Q8H |
| | 8-14 d | 5 mg/kg Q12H | 5 mg/kg Q8H | 5 mg/kg Q6H |
| | 15-28 d | 5 mg/kg Q8H | 5 mg/kg Q8H | 5 mg/kg Q6H |
| Metronidazole: Loading dose: 15 mg/kg; (参考馬偕), IV drip> 0.5-1hour, at conc < 8mg/ml Maintenance dose: as below | | | | |
| | Age≤7d | 7.5 mg/kg QD | 7.5 mg/kg Q12H | 7.5 mg/kg Q8H |
| | 8-14 d | 7.5 mg/kg QD | 7.5 mg/kg Q12H | 10 mg/kg Q8H |
| | 15-28 d | 7.5 mg/kg QD | 7.5 mg/kg Q12H | 10 mg/kg Q8H |
| Acyclovir: this dosage for herpes simplex virus infection Treat localized infections for 14 days; disseminated or CNS infections for 21 days. Dilute to a final concentration≤ 7 mg /mL ; IV infusion over 60 minutes | | | | |
| | | Body weight <1kg | 1-2kg | >2kg |
| | Age≤7d | 20 mg/kg Q12H | 20 mg/kg Q12H | 20 mg/kg Q8H |
| | 8-14 d | 20 mg/kg Q12H | 20 mg/kg Q8H | 20 mg/kg Q8H |
| | 15-28 d | 20 mg/kg Q8H | 20 mg/kg Q8H | 20 mg/kg Q8H |

Age-directed dosing:

† Postmenstrual age (PMA) is gestational age plus postnatal age.
PMA is the primary determinant of dosing interval with postnatal age as the secondary qualifier
Renal function and drug elimination are strongly correlated with postmenstrual age.

Ampicillin: general infection: **100 mg/kg/day**

Ampicillin: Group B streptococcal bacteremia (GBS) **sepsis: 200mg/kg/day**

| | PMA(weeks) | Postnatal (days) | Dose (參考上述) | Interval (hours) |
|--|------------|------------------|-------------|------------------|
| | ≤29 | 0-28 | | 12 |
| | | ≥ 29 | | 8 |
| | 30 to 36 | 0-14 | | 12 |
| | | ≥15 | | 8 |
| | 37 to 44 | 0-7 | | 12 |
| | | ≥ 8 | | 8 |
| | ≥45 | ALL | | 6 |

Ampicillin: **GBS meningitis:** 0-7 days: 200 to 300 mg/kg/day divided Q8H
8 days and older: 300 mg/kg/day divided Q6 H

Gentamicin:

Draw peak 30 min after completion infusion; draw trough just before the next dose (於第 4 個 dose 給藥前)

| | PMA(weeks) | Postnatal (days) | Dose(mg/kg) | Interval (hours) |
|--|------------|------------------|-------------|------------------|
| | ≤*29 | 0 to 7 | 5 | 48 |
| | | 8 to 28 | 4 | 36 |
| | | ≥ 29 | 4 | 24 |
| | 30 - 34 | 0 to 7 | 4.5 | 36 |
| | | ≥ 8 | 4 | 24 |
| | 35 - 44 | ALL | 4 | 24 |

*or significant asphyxia, PDA, or treatment with indomethacin

Amikacin:

Draw peak 30 min after completion infusion; draw trough just before next dose (於第 4 個 dose 給藥前)

| | PMA(weeks) | Postnatal (days) | Dose(mg/kg) | Interval (hours) |
|--|------------|------------------|-------------|------------------|
| | ≤*29 | 0 to 7 | 18 | 48 |
| | | 8 to 28 | 15 | 36 |
| | | ≥ 29 | 15 | 24 |
| | 30 - 34 | 0 to 7 | 18 | 36 |
| | | ≥ 8 | 15 | 24 |
| | 35 - 44 | ALL | 15 | 24 |

Vancomycin:

Dilute to a final concentration ≤5 mg/mL; IV infusion over 90 minutes

Draw **trough level** within 30 mins before the fourth dose. **peak level** 60 mins after end of infusion

| | PMA(weeks) | Postnatal (days) | sepsis 10mg/kg/dose meningitis 15mg/kg/dose | Interval (hours) |
|--|------------|------------------|--|------------------|
| | ≤29 | 0 to 14 | | 18 |
| | | ≥15 | | 12 |
| | | 0 to 14 | | 12 |

| | | | | |
|--|-----------------|-------------------|-------------------------|-----------------|
| | 30 to 36 | ≥15 | | 8 |
| | 37 to 44 | 0 to 7 | | 12 |
| | | ≥8 | | 8 |
| | ≥45 | ALL | | 6 |
| Teicoplanin (Tagocid): loading dose 16 mg/kg/dose, followed by 8 mg/kg/dose QD | | | | |
| Linezolid: Oral, IV. Bacteremia, community/ hospital-acquired pneumonia, skin infections. Vancomycin-resistant Enterococcus faecium (VREF) infection | | | | |
| | Gest. Age (wks) | Post Natal (days) | Dose(mg/kg) | Interval(hours) |
| | <34 | 0 to 7 | 10 | 12 |
| | | ≥8 | 10 | 8 |
| | 34-44 | 0-28 | 10 | 8 |
| Fluconazole: Invasive Candidiasis Duration of therapy for candidemia: 2 weeks after documented clearance of Candida from the bloodstream and resolution of symptoms (without metastatic complications) Treatment: loading dose 25 mg/kg Prophylaxis: 3 mg/kg/dose, twice weekly, duration up to 6 weeks | | | | |
| | Gest. Age (wks) | Post Natal (days) | Maintenance Dose(mg/kg) | Interval(hours) |
| | ≤29 | 0 to 14 | 12 | 48 |
| | | ≥15 | 12 | 24 |
| | 30 -44 | 0 to 7 | 12 | 48 |
| | | ≥8 | 12 | 24 |

小兒科、藥劑科共同制訂

資料來源:

*Micromedex- Neofax , * Uptodate 2019,

*Pediatric & neonatal dosage handbook 2018

† [Remington and Klein's Infectious Diseases of the Fetus and Newborn Infant](#) 8th edit 2016

*馬偕醫院新生兒加護病房工作手冊，2018.