

## General Antimicrobial Therapy Recommendations for Neonatal Sepsis During Cefotaxime Shortage

### Background

- Cefotaxime, one of the preferred antibiotics for management of neonatal sepsis, is currently on national backorder.
- It is unclear if or when cefotaxime will be available to providers.
- The following antibiotic regimens are appropriate alternatives to a cefotaxime-containing regimen.

### Preferred regimen

- Ampicillin + gentamicin

### Alternative regimens

- Ampicillin + cefepime
  - Preferred substitute for cefotaxime in premature neonates, neonates <28 days old (postnatal age) or those with elevated total bilirubin
- Ceftriaxone +/- ampicillin
  - Alternative for term neonates (≥37 weeks gestation) who are age ≥28 days

### Dosing recommendations <sup>1</sup>

- PMA = gestational age + postnatal age
- Dosing intervals assume normal renal function based on gestational age and postnatal age
- Dosing recommendations are for *empiric* management of neonatal sepsis; higher doses may be utilized for culture-directed therapy (i.e.; Group B streptococcus meningitis, Pseudomonas meningitis/bacteremia)

<b>Gentamicin</b>			
PMA (weeks)	Postnatal (days)	Dose	Interval (hours)
≤29	0 to 7	5 mg/kg	48
	8 to 28	4 mg/kg	36
	≥29	4 mg/kg	24
30 to 34	0 to 7	4.5 mg/kg	36
	≥8	4 mg/kg	24
≥35	ALL	4 mg/kg	24
<b>Ampicillin</b>			
≤29	0 to 28	50- 75 mg/kg	12
	>28	50 mg/kg	8
30 to 36	0 to 14	50- 75 mg/kg	12
	>14	50 mg/kg	8
37 to 44	0 to 14	50 – 75 mg/kg	12
	>14	50 mg/kg	8
≥45	ALL	50 mg/kg	6
<b>Cefepime</b>			
ALL	ALL	50 mg/kg	12
<b>Ceftriaxone</b>			
<37	0 to 14	<i>Not recommended</i>	
≥37	≥14	50 mg/kg	12

1. Bradley JS, ed. Nelson's Guide to Pediatric Antimicrobial Therapy, 2017 edition.