

## Supplementary material

**Table S1** Vancomycin dosing recommendations in neonates and children according to dosing regimens suggested in reference books evaluated

Reference	PMA	PNA	Dose
Dutch Children's Formulary (2013) (37)	-	<1 week	20 mg/kg/day in 2 doses
		1-4 weeks	30 mg/kg/day in 3 doses
		1 month-18 years	40 mg/kg/day in 3 doses
British National Formulary for children (2009) (38)	<29 weeks	-	15 mg/kg/day in 1 dose
	29-35 weeks		30 mg/kg/day in 2 doses
	>35 weeks		45 mg/kg/day in 3 doses
	-	1 month-18 years	45 mg/kg/day in 3 doses (max 2 g/day)
IDSA (2011) (39)		All ages	60 mg/kg/day in 4 doses
NeoFax – meningitis (2011) (40)	≤29 weeks	0-14 days	15 mg/kg q18h
		>14 days	15 mg/kg q12h
	30-36 weeks	0-14 days	15 mg/kg q12h
		>14 days	15 mg/kg q8h
	37-44 weeks	0-7 days	15 mg/kg q12h
		>7 days	15 mg/kg q8h
≥45 weeks	-		15 mg/kg q6h

PMA: postmenstrual age (gestational age + postnatal age); PNA: postnatal age

**Table S2** Characteristics of six representative individuals used for simulations

ID	GA (weeks)	bBW (g)	PNA	cBW (kg)
1	24	600	14 days	0.64
2	34	2,270	14 days	2.27
3	40	2,980	14 days	2.85
4	-	-	6 months	6
5	-	-	4 years	16
6	-	-	12 years	45

bBW: birth bodyweight; cBW: current bodyweight; GA: gestational age; PNA: postnatal age