

Table 2. Benzodiazepine and non-benzodiazepine anti-seizure medication dosing for first and second-line treatments of pediatric status epilepticus.

Medication	N (%)	Median dose (p25-p75) (mg/kg)	Low dose N (%)	*Minimum recommended dose (Based on NCC Guideline, Brophy et al. 2012 and AES guideline, Glauser et al. 2016)
*FIRST-LINE (BENZODIAZEPINE DOSES WITHIN 10 MINUTES)				
Lorazepam				
Total (IV/IM)	193 (56.1%)		98 (50.8%)	
<40 kg (IV/IM)	163	0.10 (0.08-0.15)	79	<40 kg: 0.10 mg/kg
>40 kg (IV/IM)	30	2 mg (2-4)	19	>40 kg: 4 mg/dose
Diazepam				
Total (PR)	87 (25.3%)		29 (33.3%)	
<2 years (PR)	24	5 mg (2.5-5)	1	-
2-5 years (PR)	33	0.50 (0.37-0.53)	16	0.50 mg/kg
6-11 years (PR)	12	0.28 (0.25-0.33)	8	0.30 mg/kg
>12 years (PR)	18	0.26 (0.23-0.35)	4	0.20 mg/kg
Total (IV/IO/PO)	18 (5.2%)		7 (38.9%)	
<66.6 kg (IV/IO/PO)	17	0.18 (0.10-0.30)	6	0.15 mg/kg
≥66.6 kg (IV/IO/PO)	1	5 (5-5)	1	10 mg/dose
Midazolam				
Total (IM)	14 (4%)		11 (78.5%)	
<13 kg (IM)	10	0.10 (0.08-0.16)	8	0.20 mg/kg
13-40 kg (IM)	3	2 (1.3-6)	2	5 mg/dose
>40 kg (IM)	1	5 (5-5)	1	10 mg/dose
IV	28 (8%)	0.09 (0.04-0.18)	24 (85.7%)	0.20 mg/kg
IN	34 (10%)	0.18 (0.12-0.26)	20 (58.8%)	0.20 mg/kg
Clonazepam				
Total (PO)	5 (1.2%)		1 (20%)	
<10 years or < 30 kg (PO)	4	0.02 (0.01-0.02)	1	0.01 mg/kg
≥10 years or ≥ 30 kg (PO)	1	1 (1-1)	0	0.5 mg/dose
**TOTAL	379		190 (50.1%)	
SECOND-LINE (FIRST NON-BENZODIAZEPINE ANTI-SEIZURE MEDICATION DOSES)				
Fosphenytoin (IV)	162 (47.1%)	19.9 (18.2-20.2)	80 (49.4%)	< 75 Kg: 20 mg PE/kg; > 75 Kg: 1500 mg
Levetiracetam (IV)	138 (40.1%)	29.7 (20-41.7)	33 (23.9%)	< 75 Kg: 20 mg/kg; > 75 Kg: 1000 mg
Phenobarbital (IV)	18 (5.2%)	18 (6.2-20)	13 (72.2%)	20 mg/kg
Phenytoin (IV)	8 (2.3%)	18 (17.4-19.6)	6 (75%)	20 mg/kg
Valproic acid (IV)	10 (2.9%)	19.3 (18.3-27.6)	5 (50%)	20 mg/kg
Lacosamide (IV)	5 (1.5%)	69 (59-100) (mg)	4 (80%)	200 mg
TOTAL	344		144 (41.9%)	

Legend: IM: intramuscular, IN: intranasal, IO: intraosseous, IV: intravenous, kg: kilogram, mg: milligram, PE: phenytoin equivalents, PO: per oreum, PR: per rectum.

*Percentages of patients receiving each type of benzodiazepine do not add up to 100% as the same patient may receive more than one benzodiazepine (different type or different route) within 10 minutes of treatment initiation.

**The total number of low benzodiazepine doses refers to the total number of benzodiazepine doses within 10 minutes of treatment initiation that were lower than 100% of the minimum recommended dose.