Supplementary Tables

**Supplementary Table 1.** Electrolyte and Lyo-Povigent composition of parenteral nutrition

|  |  |  |
| --- | --- | --- |
| **Ingredients** | **Pharmaceutical Preparation** | **Composition unit** |
| *Electrolytes* | | |
| Sodium | Sodium chloride 3% | 0.5 mmol//mL |
|  | Sodium glycerophosphate | 2 mmol//mL |
| Potassium | Potassium chloride 15% | 2 mmol/mL |
|  | Potassium phosphate | 4.4 mmol/mL |
| Calcium | Calcium gluconate 10% | 0.2325 mmol/mL |
| Phosphate | Sodium glycerophosphate | 1 mmol/mL |
|  | Potassium phosphate | 3 mmol/mL |
| Magnesium | Magnesium sulfate 10% | 0.4 mmol/mL |
| *Lyo-Povigent (4 mL/vial)* | | |
| Vitamin D | Ergocalciferol | 200 IU |

The proportion of parenteral nutrition would be admixed to cover the needs of individual neonates

**Supplementary Table 2.** Logistic regression analysis of seizure

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | **Seizure** | | **Bivariable analysis  (crude)** | | | **Multivariable analysis (adjusted)** | | |
| **Variable** |  | *Total* | *N* | *%* | *Odds ratio* | *95% CI* | *P-value* | *Odds ratio* | *95% CI* | *P-value* |
| Full feeding duration (days) | Median (IQR) | 16.0 (11.0–23.0) | 32.0 (19.0–42.0) | | 1.094 | 1.060–1.128 | <0.001 | 1.080 | 1.046–1.115 | <0.001 |
| Ca/P ratio per week | Median (IQR) | 1.2 (1.1–1.4) | 1.4 (1.2–1.7) | | 15.390 | 4.797–49.379 | <0.001 | 5.841 | 1.490–22.898 | 0.011 |
| Sodium Glycerophosphate use | No | 197 | 26 | 13.2 | 2.965 | 1.390–6.325 | 0.005 | 3.073 | 1.254–7.527 | 0.014 |
| Yes | 205 | 10 | 4.9 | 1.000 |  |  | 1.000 |  |  |
| Antenatal corticosteroid use | No | 94 | 11 | 11.7 | 1.500 | 0.709–3.177 | 0.289 |  |  |  |
| Yes | 308 | 25 | 8.1 | 1.000 |  |  |  |  |  |
| Diuretic use | No | 310 | 18 | 5.8 | 1.000 |  |  |  |  |  |
| Yes | 92 | 18 | 19.6 | 3.946 | 1.957–7.957 | <0.001 |  |  |  |
| Feeding with vitamin D | No | 40 | 5 | 12.5 | 1.525 | 0.557–4.174 | 0.411 |  |  |  |
| Yes | 362 | 31 | 8.6 | 1.000 |  |  |  |  |  |
| Intraventricular hemorrhage | No | 357 | 25 | 7.0 | 1.000 |  |  | 1.000 |  |  |
| Yes | 45 | 11 | 24.4 | 4.296 | 1.946–9.487 | <0.001 | 3.199 | 1.241–8.248 | 0.016 |
| Hydrocephalus | No | 395 | 32 | 8.1 | 1.000 |  |  |  |  |  |
| Yes | 7 | 4 | 57.1 | 15.125 | 3.243–70.549 | 0.001 |  |  |  |
| Hypernatremia | No | 340 | 21 | 6.2 | 1.000 |  |  |  |  |  |
| Yes | 62 | 15 | 24.2 | 4.848 | 2.336–10.059 | <0.001 |  |  |  |
| Hyponatremia | Nil | 53 | 4 | 7.5 | 1.000 |  |  |  |  |  |
| Mild | 210 | 13 | 6.2 | 0.808 | 0.253-2.588 | 0.720 |  |  |  |
| Moderate | 130 | 16 | 12.3 | 1.719 | 0.547-5.406 | 0.354 |  |  |  |
| Severe | 9 | 3 | 33.3 | 6.125 | 1.096-34.216 | 0.039 |  |  |  |
| Hypocalcemia | No | 255 | 15 | 5.9 | 1.000 |  |  |  |  |  |
| Yes | 147 | 21 | 14.3 | 2.667 | 1.328–5.353 | 0.006 |  |  |  |
| Hyper/Hypoglycemia | Nil | 162 | 10 | 6.2 | 1.000 |  | 0.001 |  |  |  |
| Hyper | 96 | 14 | 14.6 | 2.595 | 1.104–6.101 | 0.029 |  |  |  |
| Hypo | 93 | 1 | 1.1 | 0.165 | 0.021–1.312 | 0.089 |  |  |  |
| Both | 51 | 11 | 21.6 | 4.180 | 1.658–10.536 | 0.002 |  |  |  |

Ca/P ratio, calcium-to-phosphorus ratio; CI, confidence interval; IQR, interquartile range

P-values determined by chi-square test or Fisher's exact test when appropriated