```
┌─────────────────────────────────────────────────────────────┐
│ 298 infants born at gestational age of 23-27 weeks and       │
│ admitted within 3 days after birth                           │
└─────────────────────────────────────────────────────────────┘
        │
        │          ┌──────────────────────────────────────┐
        ├─────────▶│ 72 infants died during admission     │
        │          └──────────────────────────────────────┘
        ▼
┌─────────────────────────────────────┐
│ 226 infants survived to discharge   │
└─────────────────────────────────────┘
        │
        │          ┌──────────────────────────────────────┐
        ├─────────▶│ 11 infants lost to follow up          │
        │          │  2 infants died                       │
        │          └──────────────────────────────────────┘
        ▼
┌──────────────────────────────────────────────────────────────────────────────┐
│ 213 infants had growth and neurodevelopmental assessments at corrected age      │
│ 6, 12 and 24 months                                                             │
└──────────────────────────────────────────────────────────────────────────────┘
        │
        │          ┌──────────────────────────────────────────────────────┐
        │          │ 13 excluded                                          │
        │          │   6 congenital brain malformation                    │
        ├─────────▶│   2 genetic syndromes                                │
        │          │   1 acquired severe brain damage after discharge     │
        │          │   4 parental neuropsychiatric diseases               │
        │          └──────────────────────────────────────────────────────┘
        ▼
┌─────────────────────────────────────┐
│ 200 infants included for analysis   │
└─────────────────────────────────────┘
```
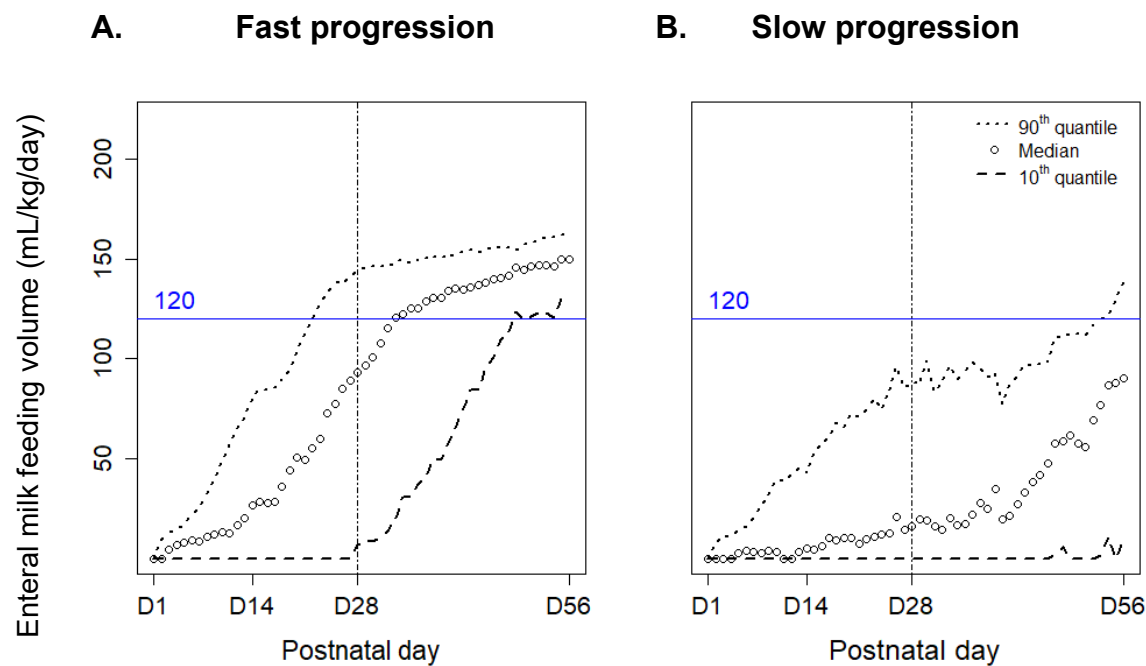
**Supplemental Figure S1**. A flowchart of the extremely preterm infants included for analysis.

**Supplemental Figure S2**. The kmlShape clustering analysis characterizes the feeding progression trajectories of extremely preterm infants (N=200) based on the daily median volume of enteral milk feeding volume (mL/kg/day) in the first 56 postnatal days as fast progression pattern (n=131, **A)** and slow progression (n=69, **B**) feeding pattern. The feeding volume data were presented as the median and the 90th and 10th quantiles, and full enteral volume was defined as 120 mL/kg/day.

**Supplemental Table S1.** The early-life medical risks and slow feeding progression pattern that associated with the trend changes of head circumference z scores from birth to 24 months of corrected age in extremely preterm infants: univariate and multivariate of GEE analyses

| Feeding Trajectories | Univariate | | | Multivariate | | |
|---|---|---|---|---|---|---|
| | Coefficient | 95% CI | *P* values | Coefficient | 95% CI | *P* values |
| **Demographics** | | | | | | |
| Gestational age, weeks | 0.288 | 0.187, 0.388 | **<0.001** | 0.216 | 0.106, 0.325 | **<0.001** |
| Female (ref. male) | 0.189 | -0.089, 0.466 | 0.182 | 0.001 | -0.225, 0.226 | 0.994 |
| Small for gestational age | -1.418 | -1.820, -1.016 | **<0.001** | -1.142 | -1.577, -0.706 | **<0.001** |
| Preeclampsia | -0.399 | -0.762, -0.037 | **0.031** | -0.210 | -0.553, 0.133 | 0.231 |
| Maternal education level (< college) | -0.057 | -0.342, 0.228 | 0.694 | | | |
| **Pulmonary/Hemodynamics** | | | | | | |
| RDS requiring surfactant therapy | -0.593 | -0.861, -0.325 | **<0.001** | -0.339 | -0.574, -0.104 | **0.005** |
| **Infection events** | | | | | | |
| Late-onset sepsis | -0.306 | -0.640, 0.028 | 0.072 | 0.278 | -0.017, 0.573 | 0.065 |
| **Severe brain injury** | -0.985 | -1.409，-0.560 | **<0.001** | -0.591 | -1.014, -0.168 | **0.006** |
| **Slow feeding progression pattern, (ref. fast)** | -0.663 | -0.963, -0.364 | **<0.001** | -0.638 | -0.884, -0.394 | **<0.001** |

GEE: generalized estimating equations