Supplemental Figure 1: Propensity Score

Propensity score composed of gestational age, sex, birthweight z-score, length of ventilation, and confirmed sepsis. Given the distribution of the scalar propensity score, it was dichotomized at or below 0.25.
Supplemental Figure 2: Strobe diagram of patient recruitment

Parents approached, n=154
  Parents declined, n=18
  Consented Infants, n=136
    Withdrew Consent, n=7
    Transferred prior to study completion, n=1
    Died prior to discharge from NICU, n=20
    Excluded due to confounding diagnoses, n=2
    Remained enrolled at discharge, n=106
      Died prior to Bayley assessment, n=2
      Withdrew consent, n=1
      Did not return for assessment, n=20
      Incomplete assessment, n=1
    Study population, n=84
      Anesthetic exposure prior to TEA, n=25
      No anesthetic exposure prior to TEA, n=59
### Supplemental Table 1: Details of Infants lost to Follow-up

|                           | Completed Follow Up (n=84) | Lost to Follow-up (n=17) | p   |
|---------------------------|---------------------------|--------------------------|-----|
| Gestational Age (wks)     | 27 (25-28)                | 27 (26-28)               | .99 |
| Birthweight (g)           | 942 ± 270                 | 957 ± 149                | .75 |
| z-score                   | -0.49 ± 0.99              | -0.22 ± 0.84             | .24 |
| Male                      | 38 (46)                   | 5 (29)                   | .28 |
| Maternal Age at birth     | 28 (23-33)                | 24 (20-32)               | .16 |
| Singleton                 | 50 (59)                   | 17 (100)                 | .002|
| Pre-natal steroids        | 76 (93)                   | 12 (71)                  | <0.001|
| Race                      |                           |                          | .16 |
| African-American          | 32 (39)                   | 11 (65)                  |     |
| Caucasian                 | 44 (54)                   | 5 (29)                   |     |
| Asian                     | 4 (5)                     | 0                        |     |
| Biracial                  | 2 (2)                     | 1 (6)                    |     |
| On Oxygen at 36 wk        | 43 (52)                   | 6 (35)                   | .28 |
| Post-natal Steroids       | 9 (11)                    | 3 (18)                   | .43 |
| PDA                       | 33 (40)                   | 7 (41)                   | .94 |
| NEC                       | 5 (6)                     | 2 (12)                   | .34 |
| Confirmed Sepsis          | 27 (33)                   | 3 (18)                   | .26 |
| Anesthesia received       | 25 (31)                   | 2 (12)                   | .14 |