

**Table 1. Univariate association between variables and the outcomes of time to full feeds, duration of parenteral nutrition and length of stay**

| Variables                          | Time to full feeds (days) |                   | Duration of PN (days) |                   | Length of stay (days) |                   |
|------------------------------------|---------------------------|-------------------|-----------------------|-------------------|-----------------------|-------------------|
|                                    | r <sup>2</sup>            | p                 | r <sup>2</sup>        | p                 | r <sup>2</sup>        | p                 |
| Gestation                          | -0.06                     | 0.06              | -0.06                 | 0.05              | <b>-0.07</b>          | <b>0.04</b>       |
| Birth Weight                       | -0.05                     | 0.08              | -0.05                 | 0.08              | <b>-0.08</b>          | <b>0.02</b>       |
| Mode of delivery                   | 0.002                     | 0.75              | 0.002                 | 0.73              | 0.004                 | 0.61              |
| Time of birth                      | 0.05                      | 0.08              | 0.06                  | 0.08              | 0.00                  | 0.45              |
| Time from birth to procedure (min) | 0.03                      | 0.16              | 0.03                  | 0.15              | 0.00                  | 0.82              |
| <b>Time of procedure</b>           | <b>0.09</b>               | <b>0.02</b>       | <b>0.08</b>           | <b>0.02</b>       | <b>0.10</b>           | <b>0.01</b>       |
| <b>Primary vs delayed closure</b>  | <b>0.28</b>               | <b>&lt;0.0001</b> | <b>0.28</b>           | <b>&lt;0.0001</b> | <b>0.31</b>           | <b>&lt;0.0001</b> |
| <b>No patch vs patch closure</b>   | <b>0.12</b>               | <b>0.005</b>      | <b>0.12</b>           | <b>0.004</b>      | <b>0.18</b>           | <b>0.0005</b>     |
| <b>Time of first feed</b>          | <b>0.21</b>               | <b>0.0001</b>     | <b>0.21</b>           | <b>0.0001</b>     | <b>0.36</b>           | <b>&lt;0.0001</b> |

Mode of delivery (0 - vaginal, 1 - caesarean section), Time of Birth (0 - 8am - 7:59pm, 1 - 8pm - 7:59am), Simple (0) vs complex (1), Time of Procedure (0 - 8am - 7:59pm, 1 - 8pm - 7:59am), Primary (0) vs delayed (1) closure, No patch (0) vs patch (1), Type of line (0 - tunnelled central line, 1 - PICC).

**Table 2. Multivariate linear regression analysis of variables found to be associated with the outcomes of time to full feeds, duration of PN and length of stay in univariate regression analysis**

| Variables                           | Time to full feeds (days)    |             | Duration of PN (days)       |             | Length of stay (days)       |             |
|-------------------------------------|------------------------------|-------------|-----------------------------|-------------|-----------------------------|-------------|
|                                     | Est (95% CI)                 | p           | Est (95% CI)                | p           | Est (95% CI)                | p           |
| Gestation                           | -4.1<br>(-11.0 - 2.8)        | 0.23        | -4.2<br>(-11.0-2.6)         | 0.22        | -5.9<br>(-13.9 - 2.1)       | 0.15        |
| Birth Weight                        | 0.00<br>(-0.02 - 0.03)       | 0.62        | 0.00<br>(-0.01 - 0.03)      | 0.61        | 0.00<br>(-0.02 - 0.03)      | 0.86        |
| Mode of delivery                    | -6.1<br>(-27.6-15.3)         | 0.57        | -6.3<br>(-27.6 - 15.0)      | 0.56        | -0.83<br>(-26.7 - 25.0)     | 0.95        |
| Time of birth                       | -19.8<br>(-41.4-1.9)         | 0.07        | -20.0<br>(-41.5 - 1.5)      | 0.07        | -9.02<br>(-35.0 - 17.0)     | 0.49        |
| Time of procedure                   | 18.6<br>(-3.3 - 40.5)        | 0.09        | 18.3<br>(-3.5 - 40.0)       | 0.10        | 20.5<br>(-5.9 - 46.9)       | 0.13        |
| Time from birth to first management | 0.04<br>(-0.04 - 0.11)       | 0.31        | 0.04<br>(-0.0-0.1)          | 0.30        | -0.01<br>(-0.09 - 0.07)     | 0.82        |
| <b>Primary vs delayed closure</b>   | <b>16.5<br/>(9.8 - 76.0)</b> | <b>0.01</b> | <b>43.0<br/>(10.1-75.9)</b> | <b>0.01</b> | 32.4<br>(-6.7 - 71.5)       | 0.10        |
| No patch vs patch closure           | -11.2<br>(-44.0 - 21.6)      | 0.50        | -11.0<br>(-43.6 - 21.6)     | 0.50        | -0.1<br>(-39.5 - 39.2)      | >0.99       |
| <b>Days to first feed</b>           | 0.98<br>(-0.7-2.6)           | 0.23        | 0.97<br>(-0.6-2.6)          | 0.23        | <b>2.34<br/>(0.5 - 4.2)</b> | <b>0.01</b> |

Time of Procedure (0 - 8am - 7:59pm, 1 - 8pm - 7:59am), Primary (0) vs delayed (1) closure, No patch (0) vs patch (1). Results shown are the estimated relationship between the variable and outcome (r<sup>2</sup>) and the 95% confidence interval of this.