NEC severity and the influence of enteral nutrition in a Cauca-
sian population compared to a historic control group.

Material and methods Since 2010, VLBW infants born

Results 230 infants were included (mean gestational age: 27+2, birth weight: 900g) and compared with 233 controls (28+5, 980g). After implementation of Infloran® NEC decreased by 32% (10.3% before vs. 7% after implementation of probiotics, p = 0.092 – corrected for confounding variables birth weight and gestational age). Probiotics had no influence on NEC severity. A NEC reduction was shown in breast fed infants only and not in formula fed infants.

Discussion The effect of Infloran® was less effective in our Cauca-
sian population than expected. Interestingly, NEC incidence was not reduced in exclusively formula fed infants. The inefficacy in this subgroup is alarming. Therefore, the impact of enteral nutrition on probiotic effects needs to be explored in fur-
ther prospective randomised controlled trials.

Background Transfusion practices are highly variable between hospitals and previous studies have suggested that blood trans-

Results During the first 28 days of life, infants received a median (25th–75th percentile) of 6 (3–9) blood transfusions resulting in 75 (44–120) ml/kg of blood. Predictors for receiving a higher volume of blood transfusions were days on respiratory support (R = 0.345, p < 0.001), hospital (R = 0.339, p < 0.001), low birth weight (R = -0.236, p < 0.001) and total ste-
roid dose (R = 0.209, p < 0.001). Hb was not a significant predictor.

Overall NEC incidence was 5.8%. There was no significant difference between NEC cases and controls in number of blood trans-

Introduction Increased intestinal permeability may precede the onset of several important diseases in preterm infants including necrotising enterocolitis (NEC) and Gram negative septicemias.

Hypothesis that increased intestinal permeability is evident at 2 weeks of age and may precede the onset of NEC or Gram neg-

Methods Infants <31 weeks gestation were enrolled. Intestinal permeability was assessed by the sugar absorption test (SAT) using lactulose and mannitol and gut leakage by stool alpha-1-antitrypsin (A1AT). Clinical data were prospectively collected.

Results Thirty-six infants were enrolled. The median (range) gestation was 27 weeks (24–30) and median birth weight was 900g (585–1460). Nine infants (25%) developed suspected or proven NEC (any NEC) of whom 5 (14%) developed ≥Bells Stage II NEC. Four infants (11%) developed Gram negative sep-
ticaemias. Results are compared between infants with either NEC or sepsis and those with neither.

The median (range) lactulose:mannitol ratio (L:M) for all infants was 0.38 (0.01–5.46) and median A1AT was 128 (41–

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