Objective To investigate whether very preterm infants randomised to a placebo group in a RCT have equivalent neurodevelopmental outcomes to infants who were eligible but not randomised (eligible NR).

Methods In the course of an RCT investigating the neuroprotective effect of early high dose erythropoietin on the neurodevelopment of very preterm infants, the outcome data of 72 infants randomised to placebo were compared with those of 108 eligible NR infants. Our primary outcome measures were the mental (MDI) and psychomotor (PDI) developmental indices of the Bayley Scales of Infant Development II at 24 months corrected age. The outcomes of the two groups were considered equivalent if the confidence intervals of their mean differences fitted within our ± 5 point margin of equivalence.

Results Except for a higher socioeconomic status of the trial participants, both groups were balanced for most perinatal variables. The mean difference (90% CI) between the placebo and the eligible NR group was -2.1 (-6.1 and 1.9) points for the MDI and -0.8 (-4.2 and 2.5) points for the PDI (in favour of the placebo group). After adjusting for the socioeconomic status, maternal age and child age at follow-up, the mean difference for the MDI was -0.5 (-4.3 and 3.4) points.

Conclusions Our results indicate that the participation of very preterm infants in an RCT is associated with equivalent long-term outcomes compared to non-participating infants.
reviews. After merging similar questions, 104 were distributed for voting. From the 30 most popular uncertainties, the top 15 questions were prioritised in a facilitated workshop. These include prevention and prediction of preterm birth, neonatal infection, lung damage, necrotising enterocolitis, pre-eclampsia, preterm premature rupture of the membranes, optimal neonatal feeding strategy, pain perception and management, a care package at neonatal discharge, emotional and practical support, attachment and bonding, and the best time for cord clamping.

Conclusions These priorities provide guidance to ensure that future research addresses questions that are important to service users and clinicians. Challenges for the priority setting partnership included maximising participation amongst people most affected by preterm birth, the breadth of the topic and securing input from an appropriate range of clinicians.

NEURODEVELOPMENTAL OUTCOME OF EXTREMELY PRETERM INFANTS AT 6.5 YEARS OF AGE; EXTREMELY PRETERM INFANTS STUDY IN SWEDEN (EXPRESS)

Objective To determine neurodevelopmental outcome at 6.5 years of age in extremely preterm children (EPT, <27 weeks) in a Swedish National cohort.

Design/methods Poulation-based prospective cohort of all EPT children born in Sweden from April 1, 2004, to March 31, 2007. Survivors were assessed and compared with a term-born reference group (n = 30). At a median age of 78 months, 445 of 494 eligible EPT children were assessed (59% by chart review). The rates of cerebral palsy, moderate visual impairment, blindness and deafness were 9.2%, 5.2%, 2.0% and 0.7%, respectively vs 0.0%, 0.5%, 0% and 0%, respectively among controls. Intellectual ability was measured with WIISC-IV and results were related to the mean and SD of the controls. Clinical examination and parental questionnaires were used for diagnosis of cerebral palsy, hearing and vision impairments. Intellectual ability was measured with WIISC-IV and results were related to the mean and SD of the controls. Clinical examination and parental questionnaires were used for diagnosis of cerebral palsy, hearing and vision impairments.

Results At a median age of 78 months, 445 of 494 eligible EPT children (90%) were assessed (59% by chart review). The rates of cerebral palsy, moderate visual impairment, blindness and deafness were 9.2%, 5.2%, 2.0% and 0.7%, respectively vs 0.0%, 0.5%, 0% and 0%, respectively among controls. Intellectual impairment < -2SD but > -3SD, and < -3SD was 9% and 19%, respectively vs 1.9% and 0%, respectively among controls. In 445 EPT children either formally assessed or by chart review, the rates of moderate and severe neurodevelopmental disabilities were 19% and 11%, respectively compared with 2.4% and 0%, respectively among control children.

Conclusion Disability rates are comparable to similar studies that report lower survival rates.

VARIABILITY IN ADIPOKINES PROFILE OF NEWBORNS AND THEIR MOTHERS AFTER DHA SUPPLEMENTATION IN PREGNANCY

Background/aims Most studies of DHA supplementation during pregnancy and infant development are focused on visual and neural development. However, scarce information is available about the influence of DHA supplementation on adioponkines expression, which are related to adipose tissue metabolism and obesity.

Objective To determine the effect of DHA supplemented dairy drink consumption during pregnancy and breastfeeding on the expression of several adipokines in mothers (pregnancy, delivery and breastfeeding) and their newborns (birth and 2.5 months of age).

Methods 60 women were randomly assigned to two intervention groups: A) Control Group (n = 30); B) Supplemented Group (n = 30): The women took 2 glasses/day of the supplemented drink (400 mg DHA/day). Dietary intervention began in week 28th of pregnancy and concluded when breastfeeding stopped. Samples of blood were obtained from: the mothers, the umbilical vein and artery; the newborn at 2.5 months postpartum. Adiponectin, resistin, leptin and active PAI-1 plasma levels were determined using a panel from Luminex xMAP technology.

Results Adiponectin was higher in the supplemented group in umbilical cord blood, whereas active-PAI showed a lower value in this group, although we observed an increase in mother’s blood during delivery. Resistin did not show any difference. Leptin was higher in the supplemented group in umbilical cord.

Conclusion The most noteworthy result is the effect of DHA supplementation in umbilical cord artery adipokines levels, increasing the adiponectin and decreasing the active PAI-1. In addition, active PAI-1 increases in mothers during delivery. It is also interesting the increase in the supplemented group of leptin.

VSL#3 SUPPLEMENTATION TO MOTHERS DURING PREGNANCY AND BREASTFEEDING IMPROVES COLIC AND REGURGITATION IN NEWBORNS, PERHAPS BY TGF-B MODULATION

Objective To evaluate the influence of maternal supplementation with VSL#3 on digestive events in newborns and cytokines levels in colostrum and mature breast milk.

Methods This pilot double-blind, randomised, placebo-controlled clinical trial (clinicaltrials.gov: NCT01367470) enrolled four weeks before expected delivery healthy pregnant women that received daily oral VSL#3 (PTM) or placebo (CM) supplementation until four weeks after delivery. In milk samples we