Methods In a prospective randomised study, infants with BW 750–1250 grams (g) were assigned to a dietary group. All infants received mother's own milk or donor HM, with donor HM-derived fortifier. Cream group also received a HM-derived cream supplement if the HM tested < 20 kcal/oz (infrared HM analyzer). F/U continued until 36 weeks PMA. Primary outcomes included growth velocities and incidences of NEC and sepsis. Non-inferiority was established if the lower bound of weight velocity exceeded -3 g/kg/day.

Results There were no differences in demographics exceptrace (p = 0.02). Theone-sided 95% lower bound of the confidence interval for the difference in meanvelocity (cream-control) was 0.38 g/kg/day.

Abstract O-124 Table 1 Comparison of growth velocities

Parameter	Cream group n = 39 *(mean ±SD)*	Control group n = 39 *(mean ±SD)*	p-value (two sample t-test with unequal variances)
Length velocity (cm/wk)	1.03 ± 0.33	0.83 ± 0.41	0.02
Head circumference (cm/wk)	0.90 ± 0.19	0.84 ± 0.22	0.21
Weight velocity (g/kg/day)	14.0 ± 2.5	12.4 ± 3.9	0.03
Weight velocity from regained BW (g/kg/day)	15.7 ± 2.5	13.7 ± 4.0	0.02

Conclusions Cream group infants had better weight and length velocity. HM cream-derived supplement should be considered as a supplement to an exclusive HM-based diet.

The Bengt Robertson Award

O-125 MESENCHYMAL STEM – OR STROMAL CELLS FROM THE DEVELOPING HUMAN LUNG ARE PERTURBED BY HYPEROXIA

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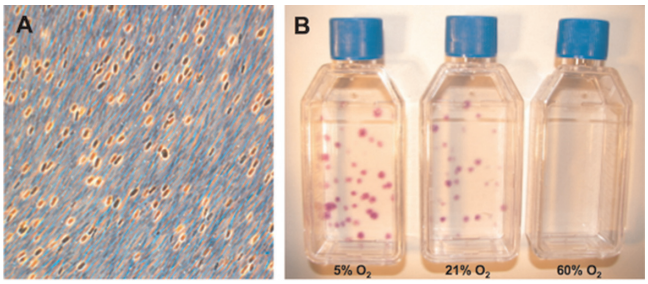
Exposure of the immature lung to oxygen concentrations higher that the ones in utero – relative (room air) or absolute hyperoxia - represents a major risk factor for the development of broncho-pulmonary dysplasia (BPD) in preterm infants. Here, we isolated resident $CD146^{pos.}/GD\text{-}2^{neg.}$ mesenchymal stem- or stromal cells (MSCs) from human fetal lungs at the canalicular stage of development (16th–18th week of gestation) to obtain new insights into their behaviour in conditions reflecting normal (5% O_2) and oxygen disrupted (21% and 60% O_2) lung development. We compared them to potentially therapeutic MSCs isolated from the umbilical cord stroma.

First, we were able to show that the mesenchyme of the fetal lung is abundant in MSCs, suggesting an important role of these cells in lung development. Single-cell plating of lung MSCs in physiological hypoxic and ambient oxygen atmospheres revealed profound reductions of colony-forming ability and colony size in normoxic conditions. Furthermore, when exposed to absolute hyperoxic (60% O_2) atmospheres, MSCs lost ability to form colonies, reduced expression of stem cell-restricted proteins like



Abstract O-125 Figure 1 Proliferation and Colony-formation of human fetal lung MSCs depends on oxygen tension

Oct-4 and Sox2, proliferated and switched cytokine secretion profiles towards a pro-fibrotic, pro-inflammatory phenotype. Alterations in the composition of the extracellular matrix were observed. Conversely, MSCs from the umbilical cord secreted high amounts of anti-fibrotic and lung-protecting proteins like PGE2 and stanniocalcin-1.

We conclude that the physiological function of resident lung MSCs is affected by relative and absolute hyperoxia, suggesting a key role of these cells in the immature lung responding to extra-uterine oxygen conditions.

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End-of-life and Quality of Life

O-126 PARENTS' EXPERIENCE OF FOLLOW-UP CONVERSATIONS IN THE PAEDIATRIC INTENSIVE CARE UNIT (PICU) AFTER DEATH OF A CHILD

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Background Approximately 4% of the children admitted to the PICU at Odense University Hospital, Denmark, dies every year. Parents are invited routinely for a multidisciplinary follow-up conversation in the PICU 4–8 weeks after the child's death. There are no previous studies on parents' experiences of these follow-ups in Denmark.

Aim To identify parents' experience of the follow-up conversation and to investigate whether it is adequate for the needs of parents for a follow-up after their child's death in the PICU.

Methods Semi-structured interviews with 6 pairs of parents 2–12 weeks after the follow-up conversation. The interviews were held in their own homes on the parents' request. Data was analysed using Malteruds' qualitative approach.

Results The analysis revealed the following themes: The way back to the PICU

Certainty and clarity

Close and known relationships

Completion of the stay in the PICU

Conclusions The parents were experiencing nervousness before the follow-up conversation, but were all pleased to have participated in these follow-ups. It was meaningful to the parents that the follow-up conversation was interdisciplinary, since it was possible to get answers to questions both about treatment and care. It was important that the staff involved in the follow-up conversation was the same that had been present through the hospitalisation and at the time of death of the child. It was very important that parents were invited to the follow-up conversation. Parents experienced the follow-up conversation as being a