ARTICLES OF INTEREST – February 2020

Assessment of extubation readiness using spontaneous breathing trials in extremely preterm neonates

To assess accuracy of comprehensive clinical event combinations in predicting successful extubation compared with clinical judgment alone, the authors analyzed data from 259 neonates (BW<1250g) from 5 NICUs enrolled in the Automated Prediction of Extubation Readiness (APEX. In total, 41 602 Spontaneous Breathing Trial (SBT) definitions were generated, demonstrating sensitivities of 51- 100% (median 96%) and specificities of 0- 72% (median 22%). Youden indices for all SBTs ranged from 0 to 0.32 (median 0.17), suggesting low accuracy. The SBT with highest Youden index defined SBT pass as having no apnea (with desaturation requiring stimulation) or increase in oxygen requirements by 15% from baseline and predicted extubation success with a sensitivity of 93% and a specificity of 39%. The authors concluded that extremely preterm neonates commonly show signs of clinical instability during ET-CPAP and the accuracy of multiple clinical event combinations to define SBTs is low.

Lower versus traditional treatment threshold for neonatal hypoglycemia

In a multicenter, randomized, noninferiority trial involving 689 otherwise healthy newborns born at > 35 weeks of gestation and identified as being at risk for hypoglycemia, the authors compared two threshold values for treatment of asymptomatic moderate hypoglycemia (lower threshold: 36mg/dl or 2mmol/l vs traditional threshold: 47mg/dl or 2.6 mmol/l). Psychomotor development at 18 months was the outcome assessed with the Bayley Scales of Infant and Toddler Development with 7.5 points (one half the SD) representing a clinically important difference. Cognitive and motor outcome scores were similar in the two groups (mean scores [±SE], 102.9±0.7 [cognitive] and 104.6±0.7 [motor] in the lower-threshold group and 102.2±0.7 [cognitive] and 104.9±0.7 [motor] in the traditional-threshold group. The authors concluded that in otherwise healthy newborns with asymptomatic moderate hypoglycemia, a lower glucose treatment threshold (36 mg/dl) was non-inferior to a traditional threshold (47 mg/dl) with regard to psychomotor development at 18 months.

Techniques to communicate better with parents during end-of-life scenarios in neonatology

Clinician communication skills were evaluated in a simulated neonatal resuscitation in which the sim patient died. Evaluators were made up of NRP instructors, simulation confederates (sim parents), medical staff, bereaved parents, and other hospital staff. Thematic analysis was conducted on evaluator responses to open-ended questions. Characteristics of good communicators during and after the resuscitation were reported. Common signs of good communication included: acknowledging the
parents, using the infant’s name, preparing the parents for death in stepwise fashion, simple and concrete language (included words such as “death,” “dying,” or “dead”), a clear decision to stop resuscitation without asking permission, reassuring the death was not the parents’ fault, and offering support for next steps. Examples of behaviors to avoid were provided. Described positive behaviors are easy to teach and learn can help clinicians interact with bereaving parents in a compassionate way.

**Lung function of adults born at very low birth weight**

The authors evaluated lung function at 26-30 years in a New Zealand cohort of 226 VLBW infants and 100 term controls born in 1986. Lung function tests were spirometry, plethysmographic lung volumes, diffusing capacity of the lung for carbon monoxide, and single-breath nitrogen washout (SBN2). The VLBW cohort was born in the era prior to surfactant therapy. The VLBW adults were more likely to report wheezing in the past 12 months, but other self-reported respiratory problems were not different. The majority of VLBW adults had normal spirometry, but they had a higher incidence of airflow obstruction, gas trapping, reduced gas exchange, and higher ventilatory inhomogeneity. Adults with history of BPD had more significant impairment. They conclude the pulmonary effects of VLBW are mild but persist into adulthood; these patients should be monitored long-term.

**Outcomes at 18 to 22 months of corrected age for infants born at 22 to 25 weeks of gestation in a center practicing active management**

This retrospective study evaluated a cohort of 255 infants born at 22-25 weeks gestation between 2006 and 2015 at a single institution. Neurodevelopmental outcomes were available for 169 of 214 survivors (78.9%). The authors found that survival to hospital discharge of those surviving to NICU admission was 78% (55/70; 95% CI, 69%-88%) at 22-23 weeks and 89% (159/178; 95% CI, 84%-93% at 24-25 weeks; P = .02). No or mild neurodevelopmental impairment in surviving infants was 64% (29/45; 95% CI, 50%-77%) at 22-23 weeks and 76% (94/124; 95% CI, 68%-83%; P = .16) at 24-25 weeks.

**The effect of extended continuous positive airway pressure on changes in lung volumes in stable premature infants: A randomized controlled trial**

This prospective trial evaluated 44 infants born at ≤32 weeks of gestation requiring ≥24 hours of CPAP. Infants were randomized to 2 weeks of extended continuous positive airway pressure (eCPAP) versus CPAP discontinuation (dCPAP). The infants randomized to eCPAP vs dCPAP had a greater increase in FRC from randomization to 2 weeks (12.6 mL vs 6.4 mL; adjusted 95% CI, 0.78-13.47; P = .03) and from randomization through discharge (27.2 mL vs 17.1 mL; adjusted 95% CI, 2.61-17.59; P = .01).

**Inhaled nitric oxide as an adjunct to neonatal resuscitation in premature infants: a pilot, double blind, randomized controlled trial**

The authors sought to determine if adding inhaled NO (iNO) decreases supplemental oxygen exposure in preterm infants requiring positive pressure ventilation (PPV) during resuscitation and to study the effects of iNO on heart rate (HR), oxygen saturation (SpO2), and need for intubation during the first 20 minutes of life. To this end, 28 infants 25 0/7-31 6/7 weeks’ gestational age requiring PPV with supplemental oxygen during resuscitation were randomized to receive either oxygen (FiO2·0.30) + iNO at 20 ppm (iNO group) or oxygen (FiO2·0.30) + nitrogen (placebo group). Cumulative FiO2 and rate of exposure to high FiO2 (>0.60) were significantly lower in the iNO group. There were no differences in
HR, SpO2, and need for intubation. Administration of iNO as an adjunct during neonatal resuscitation is feasible without side effects.

**Physiological effects of high-flow nasal cannula therapy in preterm infants (PDF)**

This is a prospective randomized crossover study comparing nCPAP and High-flow nasal cannula (HFNC) in clinically stable preterm infants with birth weights 500g – 1900g. The infants were randomized to either first receive HFNC and then nCPAP, or nCPAP first and then HFNC. The study showed that increasing flows from 2 to 8 L/min significantly increased PEEP (mean 2.3–6.1 cm H2O) while reducing nasopharyngeal end-expiratory CO2, thereby supporting dead space washout. Infants <1000g received higher PEEP at the same HFNC flow than those >1000g. The authors conclude that HFNC therapy produces clinically significant PEEP with large variability at higher flow rates.

**Characteristics and short-term outcomes of neonates with mild hypoxic-ischemic encephalopathy treated with hypothermia**

The authors present a retrospective cohort study of neonates ≥ 35 week gestation and ≥ 1800 g admitted with a diagnosis of Sarnat stage 1 encephalopathy. Infants who were treated with hypothermia were more likely outborn with lower Apgar scores, and required extensive resuscitation compared to those that were not treated. They had longer duration of respiratory support and longer hospital stay, but with lower odds of brain injury on MRI. The authors conclude that hypothermia may be beneficial in neonates with mild HIE despite higher length of stay.

**rhIGF-1/BP3 preserves lung growth and prevents pulmonary hypertension in experimental BPD**

The authors evaluated if postnatal treatment with rhIGF-1/BP3 improves lung growth and prevents pulmonary hypertension in antenatal BPD/chorioamnionitis rat models. They found that postnatal rhIGF-1/BP-3 treatment restored alveolar structure and prevented right ventricular hypertrophy compared with placebo injections and also preserved lung structure and prevented RVH after postnatal hyperoxia. They conclude that rhIGF-1/BP-3 treatment may be a novel strategy for the prevention of BPD in preterms.

**A novel endogenous antimicrobial peptide CAMP211-225 derived from casein in human milk**

CAMP211-225 is a novel peptide that occurs at higher levels in preterm milk than in term milk. The authors found the compound to have antimicrobial activity against E. Coli and to reduce ileal mucosa damage in an experimental NEC mice model. They conclude that CAMP211-225 may have potential value in the prevention and treatment of neonatal infections.

**Pediatrics**
Neuropsychological outcomes at 19 years of age following extremely preterm birth
Techniques to communicate better with parents during end-of-life scenarios in neonatology
Well-child care adherence after intrauterine opioid exposure
Prenatal repair of myelomeningocele and school-age functional outcomes
Lung function of adults born at very low birth weight
Hearing in schoolchildren after neonatal exposure to a high-dose gentamicin regimen
Global health opportunities in pediatric fellowships
Assessing cognitive outcomes in studies of extreme prematurity
Reducing variation in the management of apnea of prematurity in the intensive care nursery
Congenital toxoplasmosis presenting as eosinophilic encephalomyelitis with spinal cord hemorrhage

Journal of Pediatrics
Outcomes at 18 to 22 months of corrected age for infants born at 22 to 25 weeks of gestation in a center practicing active management
Surviving sepsis in a referral neonatal intensive care unit: Association between time to antibiotic administration and in-hospital outcomes
The effect of extended continuous positive airway pressure on changes in lung volumes in stable premature infants: A randomized controlled trial
https://www.ncbi.nlm.nih.gov/pubmed/31519441
Birth weight gradient in parent-reported special healthcare needs among children born preterm
Periventricular hemorrhagic infarction in very preterm infants: Characteristic sonographic findings and association with neurodevelopmental outcome at age 2 years
Center, gestational age, and race impact end-of-life care practices at regional neonatal intensive care units
Antenatal corticosteroids—A concern for lifelong outcomes
Predictors of parenting readiness in fathers of high-risk infants in the neonatal intensive care unit
Identifying co-exposure to opiates and gabapentin during pregnancy
Risk assessment and monitoring of chronic pulmonary hypertension in premature infants

Pediatric Research
Evidence of increased hypoxia signaling in fetal liver from maternal nutrient restriction in mice
Magnesium sulfate inhibits inflammation through P2X7 receptors in human umbilical vein endothelial cells
The developing gut–lung axis: postnatal growth restriction, intestinal dysbiosis, and pulmonary hypertension in a rodent model
A Gunn rat model of preterm hyperbilirubinemia
Short and long-term impact of hyperoxia on the blood and retinal cells’ transcriptome in a mouse model of oxygen-induced retinopathy
Increased expression of heme oxygenase-1 suppresses airway branching morphogenesis in fetal mouse lungs exposed to inflammation

Eye-tracking during simulation-based neonatal airway management

Inhaled nitric oxide as an adjunct to neonatal resuscitation in premature infants: a pilot, double blind, randomized controlled trial

Pseudo-sawtooth pattern on amplitude-integrated electroencephalography in neonatal hypoxic–ischemic encephalopathy

Neonatal frontal lobe: sonographic reference values and suggested clinical use

Spectrum of congenital anomalies among VACTERL cases: a EUROCAT population-based study

The impact of fluid balance on outcomes in premature neonates: a report from the AWAKEN study group

The postnatal presence of human chorionic gonadotropin in preterm infants and its potential inverse association with retinopathy of prematurity

Higher fat mass and fat mass accretion during the first six months of life in exclusively breastfed infants

Head circumference at birth and intellectual disability: a nationwide cohort study

Archives of Disease in Childhood - Fetal & Neonatal Edition
Parents of babies who participated in an invasive clinical study report a positive experience: the Glucose in Well Babies (GLOW) study

School-age outcomes of children without cerebral palsy cooled for neonatal hypoxic–ischaemic encephalopathy in 2008–2010

Postpartum use of oxytocin and volume of placental transfusion: a randomised controlled trial

Physiologically based cord clamping improves cardiopulmonary haemodynamics in lambs with a diaphragmatic hernia (PDF)
https://fn.bmj.com/content/fetalneonatal/105/1/18.full.pdf

Effect of spontaneous breathing on umbilical venous blood flow and placental transfusion during delayed cord clamping in preterm lambs (PDF)
https://fn.bmj.com/content/fetalneonatal/105/1/26.full.pdf

Outcomes of outborn extremely preterm neonates admitted to a NICU with respiratory distress

Impact of a mobile application for heart rate assessment in simulated neonatal resuscitation: a randomised controlled cross-over study

Incorporating dextrose gel and feeding in the treatment of neonatal hypoglycaemia

The influence of maternal ethnicity on neonatal respiratory outcome

Ethnic and socioeconomic variation in cause-specific preterm infant mortality by gestational age at birth: national cohort study (PDF)
Outcomes related to 10-min Apgar scores of zero in Japan

Measurement of gut oxygenation in the neonatal population using near-infrared spectroscopy: a clinical tool?

Physiological effects of high-flow nasal cannula therapy in preterm infants (PDF)

Journal of Perinatology
Extreme neonatal hyperbilirubinemia and kernicterus spectrum disorder in Denmark during the years 2000–2015
Frequency-following response among neonates with progressive moderate hyperbilirubinemia
The accuracy of transcutaneous bilirubinometry in preterm infants
Neonatal jaundice in association with autism spectrum disorder and developmental disorder
Accuracy of transcutaneous bilirubin on covered skin in preterm and term newborns receiving phototherapy using a JM-105 bilirubinometer
The association of pregestational and gestational diabetes with severe neonatal morbidity and mortality
Impact of human immunodeficiency virus, malaria, and tuberculosis on adverse pregnancy outcomes in the United States
Delivery timing after laser surgery for twin-twin transfusion syndrome
Renal functional markers in extremely premature infants with and without twin–twin transfusion syndrome
Survival trends and outcomes among preterm infants with congenital diaphragmatic hernia
Neonatal respiratory extracorporeal membrane oxygenation and primary diagnosis: trends between two decades
Characteristics and short-term outcomes of neonates with mild hypoxic-ischemic encephalopathy treated with hypothermia
Early oral colostrum administration in preterm infants
Wide variation in caffeine discontinuation timing in premature infants
Interleukin-6 elevation in healthy neonates
Impact of tracheostomy on language and cognitive development in infants with severe bronchopulmonary dysplasia
Neurocognitive and social-communicative function of children born very preterm at 10 years of age: Associations with microorganisms recovered from the placenta parenchyma
https://www.nature.com/articles/s41372-019-0505-8

Neonatal and maternal outcomes of pregnancies with a fetal diagnosis of congenital heart disease using a standardized delivery room management protocol

Comparison of ‘post-patent ductus arteriosus ligation syndrome’ in premature infants after surgical ligation vs. percutaneous closure

Decreasing radiographs in neonates through targeted quality improvement interventions

Mortality and morbidity in out-born extremely low birth weight neonates: a retrospective analysis

Evaluating the effects of a neonatal hypoglycemia bundle on NICU admission and exclusive breastfeeding

**American Journal of Perinatology**

Is milrinone effective for Infants with mild-to-moderate congenital diaphragmatic hernia?

Accuracy of routine prenatal genetic screening in patients referred for genetic counseling

Less invasive surfactant administration in Spain: A survey regarding its practice, the target population, and premedication use

Sex-specific genetic susceptibility to adverse neurodevelopmental outcome in offspring of pregnancies at risk of early preterm delivery

Maternal hypothyroidism during pregnancy and the risk for infectious morbidity of the offspring

Passive range-of-motion exercise and bone mineralization in preterm infants: A randomized controlled trial

Universal electrocardiographic screening for long QT syndrome in hospitalized neonates

Neonatal abstinence syndrome among infants born to mothers with sickle cell hemoglobinopathies

A new scoring system for the assessment of neonatal abstinence syndrome

Acute kidney injury and bronchopulmonary dysplasia in premature neonates born less than 32 weeks' gestation

**Maternal Health, Neonatology and Perinatology**

Significance of abnormal umbilical artery doppler studies in normally grown fetuses (PDF)
Neoreviews
Educational perspectives: palliative care education in neonatal-perinatal medicine fellowship (PDF)
https://neoreviews.aappublications.org/content/neoreviews/21/2/e72.full-text.pdf
Iron nutrition, erythrocytes, and erythropoietin in the NICU: erythropoietic and neuroprotective effects (PDF)
https://neoreviews.aappublications.org/content/neoreviews/21/2/e80.full-text.pdf
Hyperglycemia in extremely preterm infants (PDF)
https://neoreviews.aappublications.org/content/neoreviews/21/2/e89.full.pdf
Updates on assessment and monitoring of the postnatal growth of preterm infants (PDF)
https://neoreviews.aappublications.org/content/neoreviews/21/2/e98.full.pdf
Intravenous lipid emulsions in the NICU (PDF)
https://neoreviews.aappublications.org/content/neoreviews/21/2/e109.full.pdf
Case 1: newborn who cannot open eyes (PDF)
https://neoreviews.aappublications.org/content/neoreviews/21/2/e120.full.pdf
Case 2: conjugated hyperbilirubinemia in a late preterm neonate (PDF)
https://neoreviews.aappublications.org/content/neoreviews/21/2/e123.full.pdf
Case 3: emesis in a term infant with dysmorphic features (PDF)
https://neoreviews.aappublications.org/content/neoreviews/21/2/e127.full.pdf
Intrapartum challenge of fetal growth restriction (PDF)
https://neoreviews.aappublications.org/content/neoreviews/21/2/e131.full.pdf
A newborn with a large posterior head mass (PDF)
https://neoreviews.aappublications.org/content/neoreviews/21/2/e145.full.pdf

JAMA Pediatrics
Perinatal origins of cardiovascular health disparities across the life course
https://jamanetwork.com/journals/jamapediatrics/article-abstract/2756133
Breast milk–acquired cytomegalovirus in premature infants: Uncertain consequences and unsolved biological questions
Association of adverse hearing, growth, and discharge age outcomes with postnatal cytomegalovirus infection in infants with very low birth weight
Association of maternal exposure to persistent organic pollutants in early pregnancy with fetal growth
Assessment of extubation readiness using spontaneous breathing trials in extremely preterm neonates
Placental weight and risk of neonatal death (research letter)
https://jamanetwork.com/journals/jamapediatrics/article-abstract/2755411
Association between use of multiple classes of antibiotic in infancy and allergic disease in childhood
Neonatal abstinence syndrome: Incidence and health care costs in the United States, 2016

BMC Pediatrics
Stockholm preterm interaction-based intervention (SPIBI) - study protocol for an RCT of a 12-month parallel-group post-discharge program for extremely preterm infants and their parents (PDF)
Cerebral disorders in the first 7 years of life in children born post-term: a cohort study (PDF)
Neonatal sepsis and its association with birth weight and gestational age among admitted neonates in Ethiopia: systematic review and meta-analysis (PDF)
Standardised neonatal parenteral nutrition formulations – Australasian neonatal parenteral nutrition consensus update 2017 (PDF)
Cognitive function in metformin exposed children, born to mothers with PCOS – follow-up of an RCT (PDF)
Comparison of three classes of marginal risk set model in predicting infant mortality among newborn babies at Kigali University Teaching Hospital, Rwanda, 2016 (PDF)
Do NICU developmental care improve cognitive and motor outcomes for preterm infants? A systematic review and meta-analysis (PDF)
Neonatal mortality in the neonatal intensive care unit of Debre Markos referral hospital, Northwest Ethiopia: a prospective cohort study (PDF)
Comparative study between Fenton and intergrowth 21 charts in a sample of Lebanese premature babies (PDF)
Dynamics of toxigenic Clostridium perfringens colonisation in a cohort of prematurely born neonatal infants (PDF)
Application of the adenosine triphosphate sensitivity assay in infantile vascular anomalies (PDF)
Temporal association between serious bleeding and immunization: vitamin K deficiency as main causative factor (PDF)
Delayed initiation of enteral feeds is associated with postnatal growth failure among preterm infants managed at a rural hospital in Uganda (PDF)
Risk factors for low cardiac output syndrome in children with congenital heart disease undergoing cardiac surgery: a retrospective cohort study (PDF)
Comparison of frequency-domain and continuous-wave near-infrared spectroscopy devices during the immediate transition (PDF)

Pediatric Critical Care Medicine
Parental conflict, regret, and short-term impact on quality of life in tracheostomy decision-making
Clinical effects and outcomes after polymyxin b–immobilized fiber column direct hemoperfusion treatment for septic shock in preterm neonates
Platelet transfusion practice and related outcomes in pediatric extracorporeal membrane oxygenation

New England Journal of Medicine
Lower versus traditional treatment threshold for neonatal hypoglycemia
Twin anemia polycythemia sequence
Harlequin color change in a neonate
The magic of randomization versus the myth of real-world evidence

**Lancet**
Accuracy of in-utero MRI to detect fetal brain abnormalities and prognosticate developmental outcome: postnatal follow-up of the MERIDIAN cohort

**JAMA**
Association of depression, anxiety, and trauma with cannabis use during pregnancy
Clinician identification of birth asphyxia using intrapartum cardiotocography among neonates with and without encephalopathy in New Zealand
Patient and hospital factors associated with unexpected newborn complications among term neonates in US hospitals
Evaluation of the coverage of 3 antibiotic regimens for neonatal sepsis in the hospital setting across Asian countries

**BMJ**
Maternal smoking during pregnancy and fractures in offspring: national register based sibling comparison study (PDF)
https://www.bmj.com/content/bmj/368/bmj.l7057.full.pdf
Maternal and fetal outcomes following exposure to duloxetine in pregnancy: cohort study (PDF)
https://www.bmj.com/content/bmj/368/bmj.m237.full.pdf
Associations between macrolide antibiotics prescribing during pregnancy and adverse child outcomes in the UK: population based cohort study (PDF)
https://www.bmj.com/content/bmj/368/bmj.m331.full.pdf

**Pediatric Infectious Disease Journal**
Etiology and outcome of candidemia in neonates and children in Europe: an 11-year multinational retrospective study
Cytomegalovirus seroprevalence and birth prevalence of congenital CMV infection in Bosnia and Herzegovina: a single-center experience

**Pediatric Cardiology**
What is left ventricular strain in healthy neonates? A systematic review and meta-analysis
Genetic contribution to congenital heart disease (CHD)
Parents of very young children with congenital heart defects report good quality of life for their children and families regardless of defect severity
ChyloBEST: Chylothorax in infants and nutrition with low-fat breast milk
Risk factors and outcomes of Tetralogy of Fallot: From fetal to neonatal life

Neonatal non-compacted cardiomyopathy: Predictors of poor outcome

Pediatric Neurology
Compliance with standard therapies and remission rates after implementation of an infantile spasms management guideline

Are ketamine infusions a viable therapeutic option for refractory neonatal seizures?

Neonatal intraventricular hemorrhage and hospitalization in childhood

Utility of rapid sequence magnetic resonance imaging in guiding management of patients with neonatal seizures

Obstetrics and Gynecology

Race and ethnicity, medical insurance, and within-hospital severe maternal morbidity disparities

Severe maternal morbidity and mortality among indigenous women in the United States

Reported prevalence of maternal hepatitis C virus infection in the United States

Fetal movement counting and perinatal mortality: a systematic review and meta-analysis

Fetal heart rate monitoring still a mystery more than half a century later

American Journal of Obstetrics & Gynecology
Intimate partner violence during pregnancy and risk of fetal and neonatal death: a meta-analysis with socioeconomic context indicators

Intrauterine growth discordance across gestation and birthweight discordance in dichorionic twins


Cumulative effect of evidence-based practices on outcomes of preterm infants born at <29 weeks’ gestational age

The duration of fetal antenatal steroid exposure determines the durability of preterm ovine lung maturation

Noninvasive prenatal detection of hemoglobin Bart hydrops fetalis via maternal plasma dispensed with parental haplotyping using the semiconductor sequencing platform
**BASIC SCIENCE SELECTIONS**

Nutrient restriction has limited short-term effects on gut, immunity, and brain development in preterm pigs

Is low-grade gastric residual to predict necrotizing enterocolitis in preterm piglets as models for infants

Combined L-citrulline and tetrahydrobiopterin therapy improves NO signaling and ameliorates chronic hypoxia-induced pulmonary hypertension in newborn pigs

Bovine colostrum before or after formula feeding improves systemic immune protection and gut function in newborn preterm pigs

Neurologic outcomes of the premature lamb in an extrauterine environment for neonatal development

NEC-like intestinal injury is ameliorated by Lactobacillus rhamnosus GG in parallel with SIGIRR and A20 induction in neonatal mice

Effects of hyperoxia exposure on the expression of Nrf2 and heme oxygenase-1 in lung tissues of premature rats

AMP-kinase dysfunction alters notch ligands to impair angiogenesis in neonatal pulmonary hypertension

Preterm birth impairs postnatal lung development in the neonatal rabbit model

Frequent mutation of hypoxia-related genes in persistent pulmonary hypertension of the newborn

Hyperoxia injury in the developing lung is mediated by mesenchymal expression of Wnt5A

rhIGF-1/BP3 preserves lung growth and prevents pulmonary hypertension in experimental BPD
A novel endogenous antimicrobial peptide CAMP211-225 derived from casein in human milk

ADDITIONAL JOURNAL SELECTIONS

Intraventricular hemorrhage in very preterm infants an innocent condition? Structural and functional evaluation of the brain reveals regional neurodevelopmental abnormalities

Prostaglandin E1 in infants with congenital diaphragmatic hernia (CDH) and life-threatening pulmonary hypertension

Oropharyngeal colostrum positively modulates the inflammatory response in preterm neonates

Lung surfactant accelerates skin wound healing: a translational study with a randomized clinical phase I study

Tracheostomy in the extremely premature neonate: a multi-institutional study

Feasibility of transcutaneous pCO2 monitoring during immediate transition after birth - a prospective observational study

Parenteral nutrition in moderately preterm, otherwise healthy neonates is not associated with improved short-term growth outcomes

Different effects of premature infant formula and breast milk on intestinal microecological development in premature infants

Intrauterine substance exposure and the risk for subsequent physical abuse hospitalizations

Lifelong pulmonary sequelae of bronchopulmonary dysplasia
Sillers L, Alexiou S and Jensen EA. Curr Opin Pediatr.
Predictive ability of neonatal illness severity scores for early death in extremely premature infants

Semiquantitative ultrasound assessment of lung aeration correlates with lung tissue inflammation