ARTICLES OF INTEREST – January 2023

A randomised trial comparing weaning from CPAP alone with weaning using heated humidified high flow nasal cannula in very preterm infants: the CHiPS study
Joanne Clements, Pernille M Christensen and Michael Meyer. Arch Dis Child Fetal Neonatal Ed.

This single-center, non-inferiority, randomized controlled study of preterm infants (< 30wk) investigating weaning from nCPAP using high flow nasal cannula (nHF) compared to weaning using nCPAP. Infants (n=120) were randomized to nHF 6 L/min (n=59) or bubble CPAP 6 cm (n=61). The primary outcome was time on respiratory support from randomization to 72 hours off respiratory support or 36 weeks’ PMA; non-inferiority threshold set at 15%. No differences in baseline demographics between the groups. The mean duration of respiratory support following randomization for the nCPAP group was 401 hours and 375 hours in the nHF group. The study concluded that for infants ready to wean from nCPAP, nHF weaning was non-inferior to nCPAP weaning. In addition, stress scores were reduced in the nHF group. However, in a subgroup analysis for infants <27 weeks’ GA, it was nonconclusive that nHF weaning is non-inferior to nCPAP weaning.

Double-blinded randomized controlled trial of optimizing nutrition in preterm very low birth weight infants: Bayley scores at 18–38 months of age
Jordan D Reis, Kristine Tolentino-Plata, Maria Caraig, et al. J Perinatol.

This is a follow up study of a double-blinded RCT that initially assessed the effect of type of human milk supplementation on growth in neonates <29wks GA and those <35wks GA who were SGA. Infants were randomized to receive optimized nutrition (i.e., feeding adjustments based on growth and serial measurements of serum nutrients, n=58) or individualized nutrition (based on serial measurements of macronutrients in mother’s own milk (MOM), experimental group, n=62). This follow up study assessed Bayley scores in 91/114 (80%) infants at 18-38 months of age. The two groups had similar frequencies of low cognitive, motor and language Bayley scores and similar age-adjusted Bayley scores. The initial study had no difference in nutrient intake and growth prior to discharge from the NICU between the two groups. Therefore, this study suggests that individualized nutrition may not improve growth and neurodevelopment compared to infants already receiving optimized nutrition.

A prospective, longitudinal, case–control study to evaluate the neurodevelopment of children from birth to adolescence exposed to COVID-19 in utero

This paper outlines the designs and methodology for a prospective, case-controlled study aimed to investigate the long-term impacts of SARS-CoV2 exposure on children exposed in utero. Women infected with SARS-CoV-2 during pregnancy are being recruited from two centers in Melbourne, Australia and Londrina, Brazil. Cases are matched 2:1 with women who gave birth in the same month of
delivery, are of similar age but did not contract SARS-CoV-2 during their pregnancy. The study aims to collect developmental data at various time-points from birth to 15 years of life as well as biospecimens.

Cerebral regional tissue Oxygen Saturation to Guide Oxygen Delivery in preterm neonates during immediate transition after birth (COSGOD III): multicentre randomised phase 3 clinical trial
Gerhard Pichler, Katharina Goeral, Marlene Hammerl, et al. BMJ.

This multicenter randomized controlled phase 3 trial assessed whether monitoring of cerebral tissue oxygen saturation using near infrared spectroscopy in addition to routine monitoring combined with defined treatment guidelines during immediate transition and resuscitation increases survival without cerebral injury of premature infants <32 weeks’ gestation compared with standard care alone. Neonates were randomly assigned to either standard care or standard care plus monitoring of cerebral oxygen saturation with a dedicated treatment guideline during immediate transition (first 15 minutes after birth) and resuscitation. The primary outcome was a composite of survival without cerebral injury. In the near infrared spectroscopy, delivery room Fio2 was titrated based on cerebral regional tissue oxygen saturation (crSO2) in addition to SpO2. 607 infants (304 and 303, respectively) were included in the final analysis. The incidence of delivery room interventions within the first 15 minutes after birth did not differ between the groups except for a significantly higher number of neonates receiving intravenous fluids in the near infrared spectroscopy group (12 (4.0%) v 2 (0.7%), P=0.007; table 2). CrSO2 values at each minute during the first 15 minutes after birth did not differ between the groups. FiO2 was slightly higher in the near infrared spectroscopy group than control group in the first minutes after birth, and SpO2 values during the first 15 minutes after birth were similar in both groups. Overall, 252 (82.9%) out of 304 neonates in the near infrared spectroscopy group survived without cerebral injury compared with 238 (78.5%) out of 303 in the control group (relative risk 1.06, 95% confidence interval 0.98 to 1.14). Monitoring of cerebral tissue oxygen saturation in combination with dedicated interventions in preterm neonates (<32 weeks’ gestation) during immediate transition and resuscitation after birth did not result in substantially higher survival without cerebral injury compared with standard care alone.

Levetiracetam versus phenobarbital for neonatal seizures: a retrospective cohort study

The authors compared the safety and efficacy of levetiracetam (LEV) and phenobarbital (PB) as first-line antiseizure medication (ASM) for neonatal seizures by conducting a retrospective cohort study of 108 neonates with EEG-confirmed seizures treated with first-line LEV or PB in 2012 to 2020. Their study suggests a potential non-inferiority and a more acceptable safety profile for LEV, which may thus be a reasonable option as first-line ASM for neonatal seizures in place of PB. Treatment should be initiated as early as possible since higher seizure frequencies predispose to less favorable responses.

Neuroprotective effect of lipopolysaccharides in a dual-hit rat pup model of preterm hypoxia-ischemia

The authors show that administering a single injection of LPS (0.1 mg/kg) to postnatal-day-2 rat pups 14 h before inducing HI effectively protects the brain from HI-associated damage. The LPS-treated HI rat pups have significantly less histopathology compared to the saline-treated HI rat pups. Apoptotic deaths were dramatically curtailed in both the neocortex and white matter when evaluated at 2 days of recovery. One mechanism through which LPS pre-treatment appears to be preventing injury is through the AKT-endothelial nitric oxide synthase (eNOS) pathway as LPS induced an increase in both the expression and phosphorylation of eNOS. Altogether these data show that the neocortex, as well as the white matter sustain damage after HI at this timepoint in forebrain development and that acutely activating the immune system can protect the brain from brain injury.

Fetal growth restriction impairs lung function and neurodevelopment in an early preterm rabbit model
The authors hypothesize that FGR (fetal growth restriction) has a detrimental effect on prematurity in both pulmonary function and neurodevelopment. FGR was induced at gestational day (GD) 25 by placental underperfusion, accomplished by partial uteroplacental vessel ligation in one uterine horn. Rabbits were delivered by cesarean section at GD 29, and placentas were harvested for histology. Neonates underwent neurobehavioral or pulmonary functional assessment at postnatal day 1. FGR was associated with higher perinatal mortality, lower birth and placental weight, and a similar brain-to-body weight ratio compared to controls. Placental underperfusion decreased labyrinth and junction zone volumes in FGR placentas. FGR impaired pulmonary function, depicted by higher parenchymal resistance, damping, and elastance. Neurobehavioral tests showed motoric and sensorial impairment in FGR rabbits. In FGR brains, cell density was globally reduced, with higher apoptosis in selected areas.

**Early amino acids in extremely preterm infants and neurodisability at 2 years**

In this multicenter, parallel-group, double-blind, randomized, placebo-controlled trial, 434 infants were enrolled with birth weights less than 1000 gms at 8 NICUs. It was found that extra parenteral amino acids at a dose of 1 g per day for 5 days after birth did not increase the number who survived free from neurodisability at 2 years.

**Age at first extubation attempt and death or respiratory morbidities in extremely preterm infants**

This subanalysis of a multicenter observational study included 250 infants with birth weights of 1250 g or less and intubated within 24 hours of birth. Of the infants included, 129 (52%) were extubated within 7 days, 93 (37%) between 8 and 35 days, and 28 (11%) beyond 35 days of life. The authors found that only early and successful extubation was independently associated with lower death/BPD rates compared with early failure (OR, 0.13; 95% CI, 0.04-0.40) and late failure (OR, 0.19; 95% CI, 0.04-1.00). Early and successful extubation was also independently associated with lower BPD among survivors compared with early failure (OR, 0.18; 95% CI, 0.05-0.6), late success (OR, 0.26; 95% CI, 0.07-0.97), and late failure (OR, 0.12; 95% CI, 0.02-0.72).

**Association of survival at 22 weeks’ gestation with use of antenatal corticosteroids and mode of delivery in the United States**
Ramesh Vidavalur, Zeenat Hussain and Naveed Hussain. *JAMA Pediatr.*

This cross-sectional study utilized the US Centers for Disease Control and Prevention-Wide-Ranging Online Data for Epidemiological Research to evaluate the association of antenatal corticosteroid use and cesarean delivery with birth-linked survival at birth certificate reporting. From 2016 to 2020, there were 5713 births at 22 weeks’ gestational age reported to the CDC. The authors found an increasing trend of median-1 year survival, from 11.6% in 2017 to 16.7% in 2019. Of particular note, there were higher survival rates for infants delivered via cesarean birth (OR, 4.2; 95% CI, 3.6-5.0, p<0.001) and a more than 3-fold increase in the odds of survival when antenatal steroids were used (OR, 3.5; 95% CI, 3.0-4.1; p<0.001

**OTHER NOTEWORTHY ARTICLES – JANUARY, 2023**

**COVID-19**
A prospective, longitudinal, case–control study to evaluate the neurodevelopment of children from birth to adolescence exposed to COVID-19 in utero
Clinical characteristics, transmission rate and outcome of neonates born to COVID-19-positive mothers: a prospective case series from a resource-limited setting
Association of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection with maternal mortality and neonatal birth outcomes in Botswana by human immunodeficiency virus status

Coronavirus disease 2019 (COVID-19) perinatal outcomes across the pandemic at an academic medical center in New York City

**Pediatrics**
Risk factors for suffocation and unexplained causes of infant deaths
Using AAP guidelines for managing febrile infants without c-reactive protein and procalcitonin
Defining an infant’s race and ethnicity: a systematic review

**Journal of Pediatrics**
Growth during infancy after extremely preterm birth: associations with later neurodevelopmental and health outcomes
Inhaled nitric oxide therapy in the post-acute phase in extremely preterm infants: a Japanese cohort study
Age at first extubation attempt and death or respiratory morbidities in extremely preterm infants
Plasma biomarkers of evolving encephalopathy and brain injury in neonates with hypoxic-ischemic encephalopathy
Health care utilization in the first 7 years in children with fetal growth abnormalities: a retrospective cohort study
Following birth hospitalization: invasive bacterial infections in preterm infants aged 7-90 days
Bilateral Marcus Gunn jaw-winking syndrome in a neonate with congenital neurosyphilis

**Pediatric Research**
Stakeholder engagement in neonatal clinical trials: an opportunity for mild neonatal encephalopathy research
Oxygenation in the NICU: there is more to it than meets the eye
Why monitor the neonatal brain—that is the important question
Vein of Galen aneurysmal malformation: rationalizing medical management of neonatal heart failure
Probiotic supplementation for neonates with congenital gastrointestinal surgical conditions: guidelines for future research
Development and use of an infant resuscitation performance tool (Infa-RePT) to improve team performance
Granulocyte-macrophage colony-stimulating factor suppresses induction of type I interferon in infants with severe pneumonia

Intraventricular hemorrhage induces inflammatory brain damage with blood–brain barrier dysfunction in immature rats

Immunomodulatory therapy using a pediatric dialysis system ameliorates septic shock in miniature pigs

Pulse oximetry reliability for detection of hypoxemia under motion in extremely premature infants

Bronchopulmonary dysplasia is associated with polyhydramnios in a scan for novel perinatal risk factors

Neuromonitoring, neuroimaging, and neurodevelopmental follow-up practices in neonatal congenital heart disease: a European survey

Persistent high blood pressure and renal dysfunction in preterm infants during childhood

Pre-phototherapy total serum bilirubin levels in extremely preterm infants

Prenatal smoking and drinking are associated with altered newborn autonomic functions

Association of placental PPARα/γ and miR-27b expression with macrosomia in healthy pregnancy

Archives of Disease in Childhood - Fetal & Neonatal Edition
Optimising growth in very preterm infants: reviewing the evidence

What's new in the management of neonatal early-onset sepsis?

Comparison of regional versus global growth charts for the classification of small-for-gestational age neonates

Short-term pulmonary and systemic effects of hydrocortisone initiated 7–14 days after birth in ventilated very preterm infants: a secondary analysis of a randomised controlled trial

Clinical outcomes of preterm infants while using automated controllers during standard care: comparison of cohorts with different automated titration strategies

Early-onset sepsis in very preterm neonates in Australia and New Zealand, 2007–2018

Acceleration during neonatal transport and its impact on mechanical ventilation

Feasibility of and experience using a portable MRI scanner in the neonatal intensive care unit

Lung ultrasound of the dependent lung detects real-time changes in lung volume in the preterm lamb

Aetiology and outcomes of prolonged neonatal jaundice in tertiary centres: data from the China Neonatal Genome Project

A randomised trial comparing weaning from CPAP alone with weaning using heated humidified high flow nasal cannula in very preterm infants: the CHIPS study
Remote ischaemic conditioning in necrotising enterocolitis: a phase I feasibility and safety study

Journal of Perinatology
Immunoglobulin G and subclasses placental transfer in fetuses and preterm newborns: a systematic review
Retrospective application of algorithms to improve identification of pregnancy outcomes from the electronic health record
An e-Delphi study on mode of delivery and extremely preterm breech singletons
Mode of delivery in the context of periviable birth: informed deference and shared decision-making
Assessing shared decision making during antenatal consultations regarding extreme prematurity
Physician cesarean delivery rates and severe perinatal morbidity among low-risk nulliparas
Maternal bleeding complications and neonatal outcomes following early versus delayed umbilical cord clamping in cesarean deliveries for very low birthweight infants
Pregnancies complicated by gestational diabetes and fetal growth restriction: an analysis of maternal and fetal body composition using magnetic resonance imaging
Influence of maternal and perinatal factors on macronutrient content of very preterm human milk during the first weeks after birth
Human milk pH is associated with fortification, postpartum day, and maternal dietary intake in preterm mother-infant dyads
Effect of maternal voice on proportion of oral feeding in preterm infants
Achieving healthy people 2030 breastfeeding targets in the United States: challenges and opportunities
Double-blinded randomized controlled trial of optimizing nutrition in preterm very low birth weight infants: Bayley scores at 18–38 months of age
Describing patterns in serum creatinine in infants with and without necrotizing enterocolitis
Impact of concomitant necrotizing enterocolitis on mortality in very low birth weight infants with intraventricular hemorrhage
A quality improvement initiative to reduce necrotizing enterocolitis in high-risk neonates
Feeding infants with hypoxic ischemic encephalopathy during therapeutic hypothermia

Outcomes of neonates with a 10-min apgar score of zero: a systematic review and meta-
Serum creatinine patterns in neonates treated with therapeutic hypothermia for neonatal encephalopathy

Recurrent late-onset sepsis in extremely low birth weight infants is associated with motor deficits in early school age

Cerebral hemodynamics and regional oxygen metabolism during ductus arteriosus ligation in preterm infants

“Mild” hypoxic-ischaemic encephalopathy and therapeutic hypothermia: a survey of clinical practice and opinion from 35 countries

Short-term outcome after repeated less invasive surfactant administration: a retrospective cohort study

Retinopathy of prematurity is a biomarker for pathological processes in the immature brain

MRI characterization of blood flow and oxygen delivery in the fetal sheep whilst exposed to sildenafil citrate

Early hyperglycemia in very preterm infants is associated with reduced white matter volume and worse cognitive and motor outcomes at 2.5 years

Pilot study to evaluate a new method for endotracheal administration of surfactant in neonatal respiratory distress syndrome: fiberscope assisted surfactant therapy (fast)

Audio feature analysis for acoustic pain detection in term newborns

Vaginal delivery is associated with neurochemical evidence of increased neuroaxonal remodelling in infants from the kuno-kids health study: cross-sectional analysis

Mind the b2: life-threatening neonatal complications of a strict vegan diet during pregnancy

Hyperglycemia and lactic acidosis associated with linezolid therapy in an extremely premature infant

Less-invasive diagnostic approaches for infants with suspected differences of sex development: a case report of a 297-g neonate with ambiguous genitalia

American Journal of Perinatology
The association between placenta accreta spectrum severity and incidence of small for gestational age neonates

Fetal echocardiogram and detailed first trimester obstetric ultrasound: ICD-10 indications

Effects of different onset times of early caffeine treatment on mesenteric tissue oxygenation and necrotizing enterocolitis: a prospective, randomized study

Association of rural and frontier residence with very preterm and very low birth weight delivery in non-level III NICUs
Neonatal outcomes after uterus transplantation: Dallas uterus transplant study

Maternal and neonatal morbidity after cesarean delivery for active phase arrest following adoption of the obstetric care consensus guidelines


Latency period after preterm premature rupture of membranes: singletons versus twins

Deleterious and protective psychosocial and stress-related factors predict risk of spontaneous preterm birth

Journal of Neonatal-Perinatal Medicine
No new content

Maternal Health, Neonatology and Perinatology
No new content

Neoreviews
Operative vaginal birth: neonatal implications for vacuum and forceps-assisted vaginal delivery

Inflammatory bowel disease in the childbearing adult and newborn

Management of hepatitis b and c during pregnancy: neonatal implications

Urticaria in a term infant with charge syndrome

Respiratory failure in an 11-day-old neonate

A neonate with a rare presentation of persistent hypoglycemia and prolonged jaundice

Infant with asymmetric crying facies

Trisomy 13: survival beyond the NICU

How high is too high: implications of hypertension on the fetus and neonate

JAMA Pediatrics
In utero exposure to maternal injury and the associated risk of cerebral palsy

Association of survival at 22 weeks' gestation with use of antenatal corticosteroids and mode of delivery in the United States

BMC Pediatrics
Characteristics and outcomes of neonates with intrapartum asphyxia managed with therapeutic hypothermia in a public tertiary hospital in South Africa
Establishment and evaluation of nomogram for predicting intraventricular hemorrhage in neonatal acute respiratory distress syndrome

Transanal recto-anal anastomosis for treatment of rectal atresia: a review of 4 cases

Determinants of birthweight in rural Sri Lanka; a cohort study

Risk factors and clinical outcomes of extubation failure in very early preterm infants: a single-center cohort study

The provision of the baby box was associated with safe sleep practices in a low-resource community: a randomized control trial in Ecuador

Prevention of mother-to-child transmission of HIV in Kermanshah, west of Iran from 2014 to 2021


Epidemiology of neonatal mortality: a spatial and multilevel analysis of the 2019 mini-Ethiopian demographic and health survey data

Plasma concentration and eGFR in preterm and term neonates receiving gentamicin or successive amikacin therapy

De novo variations of ANK1 gene caused hereditary spherocytosis in two Chinese children by affecting pre-mRNA splicing

Findings in percutaneous trans-hepatic cholecysto-cholangiography in neonates and infants presenting with conjugated hyperbilirubinemia: emphasis on differential diagnosis and cholangiographic patterns

The application value of mean red blood cell volume and red blood cell volume distribution width combined with total serum bilirubin in the early screening of neonatal hemolytic disease

Oxygenation index in the first three weeks of life is a predictor of bronchopulmonary dysplasia grade in very preterm infants

The effect of foetal and early childhood growth on metabolic derangements of Sri Lankan children

Association of perinatal factors with suspected developmental delay in urban children aged 1–36 months - a large-scale cross-sectional study in China

Prevalence and determinants of early onset neonatal sepsis at two selected public referral hospitals in the Northwest Ethiopia: a cross-sectional study

Diagnostic value of peripheral TiM-3, NT proBNP, and Sestrin2 testing in left-to-right shunt congenital heart disease with heart failure

Analysis of factors influencing the use of child restraint system by parents of children aged 0–6 years: an information, motivation, behavioral skills model-based cross-sectional study

Dilated coronary arteries in a 2-month-old with RIT1-associated Noonan syndrome: a case report
Infant in extremis: respiratory failure secondary to lower airway infantile hemangioma
Correlation analysis of NT-proBNP (N-terminal probrain natriuretic peptide), 25-Hydroxyvitamin D, HMGB1 (High-mobility group box 1), ACTA (endogenous activin A), blood glucose level, and electrolyte level with developmental quotient scores in neonates with hypoxic-ischemic encephalopathy
The impact of early-life antibiotics and probiotics on gut microbial ecology and infant health outcomes: a Pregnancy and Birth Cohort in Northwest China (PBCC) study protocol
New insights on Noonan syndrome’s clinical phenotype: a single center retrospective study
Early outcomes of preterm neonates with respiratory distress syndrome admitted at Muhimbili National Hospital, a prospective study
Bleeding in neonates with severe thrombocytopenia: a retrospective cohort study
Congenital syphilis as the cause of multiple bone fractures in a young infant case report
Physical self-concept and ability to swim in patients born with anorectal malformation and Hirschsprung’s disease: a case control study

Pediatric Critical Care Medicine
Video-recorded in situ simulation before moving to the new combined neonatal/pediatric intensive care facility: an observational study

New England Journal of Medicine
Early amino acids in extremely preterm infants and neurodisability at 2 years

Lancet
Evaluation of the safety, immunogenicity, and faecal shedding of novel oral polio vaccine type 2 in healthy newborn infants in Bangladesh: a randomised, controlled, phase 2 clinical trial

JAMA
Novel oral polio vaccine safely induces antibodies among vaccine-naive infants

BMJ
Gestational age at birth and cognitive outcomes in adolescence: population based full sibling cohort study
Cerebral regional tissue Oxygen Saturation to Guide Oxygen Delivery in preterm neonates during immediate transition after birth (COSGOD III): multicentre randomised phase 3 clinical trial

Pediatric Infectious Disease Journal
Incidence of group b streptococcus disease in infants in China: an updated systematic review and meta-analysis
Hearing outcome and virologic characteristics of children with congenital cytomegalovirus infection in relation to antiviral therapy: a retrospective cohort study

**Pediatric Cardiology**

The prevalence of congenital anomalies of the airway or lung in infants with hypoplastic left heart syndrome and differences in midterm outcomes: a national pediatric cardiology quality improvement collaborative registry analysis

Surgical outcomes of congenital heart disease in Down syndrome: tertiary center experience—focus on the electrical conduction system

Tricuspid valve blood cysts mimicking thrombus or vegetation on echocardiogram in a neonate

**Pediatric Neurology**

Partial efficacy of vigabatrin in an infant with West syndrome due to pyruvate dehydrogenase complex deficiency: a case report

Distribution of intrathalamic injury according to nuclei and vascular territories in children with term hypoxic-ischemic injury

Levetiracetam versus phenobarbital for neonatal seizures: a retrospective cohort study

**Obstetrics and Gynecology**

Measures of racism and discrimination in preterm birth studies

Timing of maternal smoking cessation and newborn weight, height, and head circumference

**American Journal of Obstetrics & Gynecology**

Lactogenesis and breastfeeding after immediate vs delayed birth-hospitalization insertion of etonogestrel contraceptive implant: a noninferiority trial

Reduced fetal growth velocity and weight loss are associated with adverse perinatal outcome in fetuses at risk of growth restriction

Placental transcriptomic signatures of spontaneous preterm birth

Cell-free DNA in maternal blood and artificial intelligence: accurate prenatal detection of fetal congenital heart defects

Noninvasive prediction models of intra-amniotic infection in women with preterm labor

Long-term childhood outcomes for babies born at term who were exposed to antenatal corticosteroids

General health in a cohort of children conceived after assisted reproductive technology in the United Kingdom: a population-based record-linkage study

Effect of pentaerythritol tetranitrate (PETN) on the development of fetal growth restriction in pregnancies with impaired uteroplacental perfusion at midgestation—a randomized trial
**Hospital Pediatrics**
Telemedicine improves rate of successful first visit to nicu follow-up clinic  
Quality improvement through nurse-initiated kaiser sepsis calculator at a county hospital  
Assessing and validating a model of study completion for a prospective cohort of healthy newborns  
Safe or sorry? risk reduction and humanism in newborn medicine  

**BASIC SCIENCE SELECTIONS**
Genome-wide exploration of a pyroptosis-related gene module along with immune cell infiltration patterns in bronchopulmonary dysplasia  
Evaluation of a plant-based infant formula containing almonds and buckwheat on gut microbiota composition, intestine morphology, metabolic and immune markers in a neonatal piglet model  
Involvement of HIF1 stabilization and VEGF signaling modulated by Grx-1 in murine model of bronchopulmonary dysplasia  
Neuroprotective effect of lipopolysaccharides in a dual-hit rat pup model of preterm hypoxia-ischemia  
Development of a peripheral blood transcriptomic gene signature to predict bronchopulmonary dysplasia  
Longitudinal measurement of histidine-rich glycoprotein levels in bronchopulmonary dysplasia: a pilot study  
Lung ultrasound of the dependent lung detects real-time changes in lung volume in the preterm lamb  
PAR2 overexpression is involved in the occurrence of hyperoxygen-induced bronchopulmonary dysplasia in rats  
Fetal growth restriction impairs lung function and neurodevelopment in an early preterm rabbit model  
Inhibition of ERK/CREB signaling contributes to postoperative learning and memory dysfunction in neonatal rats  
MSC EXO and tempol ameliorate bronchopulmonary dysplasia in newborn rats by activating HIF-1alpha  
Beta-glucan protects against necrotizing enterocolitis in mice by inhibiting intestinal inflammation, improving the gut barrier, and modulating gut microbiota  
IL-33-ST2 pathway regulates AECII transdifferentiation by targeting alveolar macrophage in a bronchopulmonary dysplasia mouse model  
ADDITIONAL JOURNAL SELECTIONS

Neonatal systemic hypertension across the PHIS database: An update
https://www.ncbi.nlm.nih.gov/pubmed/36682689

The effect of hopelessness on depressive symptoms in mothers of infants hospitalized at neonatal intensive care unit: the mediating role of anxiety
https://www.ncbi.nlm.nih.gov/pubmed/36688831

Interventions for the management of pain and sedation in newborns undergoing therapeutic hypothermia for hypoxic-ischemic encephalopathy: a systematic review

Brain injury patterns in hypoxic ischemic encephalopathy of term neonates

The prognostic value of neonatal conventional-EEG monitoring in hypoxic-ischemic encephalopathy during therapeutic hypothermia

Role of systemic inflammatory indices in the prediction of moderate to severe bronchopulmonary dysplasia in preterm infants

Impact of delayed time to antibiotics in medical and surgical necrotizing enterocolitis

Oxygenation index in the first three weeks of life is a predictor of bronchopulmonary dysplasia grade in very preterm infants

Lung transplantation for bronchopulmonary dysplasia

Pharmacokinetics of l-citrulline in neonates at risk of developing bronchopulmonary dysplasia-associated pulmonary hypertension

Feasibility of implementing a modified SENSE program to increase positive sensory experiences for preterm infants in the neonatal intensive care unit (NICU): a pilot study

Hypocarbia is associated with adverse outcomes in Hypoxic Ischemic Encephalopathy (HIE)

Longer duration of initial invasive mechanical ventilation is still a crucial risk factor for moderate-to-severe bronchopulmonary dysplasia in very preterm infants: a multicenter prospective study

Maternal smoking during pregnancy negatively affects brain volumes proportional to intracranial volume in adolescents born very preterm

Late vitreoretinal complications of regressed retinopathy of prematurity: retinal break, vitreous hemorrhage, and retinal detachment

Assisted reproductive technology and neonatal intensive care unit: A retrospective observational study from a single center

Behavioral outcome of very preterm children at 5 years of age: Prognostic utility of brain tissue volumes at term-equivalent-age, perinatal, and environmental factors

Development of necrotizing enterocolitis after blood transfusion in very premature neonates
Hypothermia combined with neuroprotective adjuvants shortens the duration of hospitalization in infants with hypoxic ischemic encephalopathy: Meta-analysis

Risk factors for hypoxic-ischemic encephalopathy or neonatal death in placental abruption