Publications Working Group

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# American Academy of Pediatrics



DEDICATED TO THE HEALTH OF ALL CHILDREN

Section on Neonatal-Perinatal Medicine

#### **ARTICLES OF INTEREST – December, 2023**

Bifidobacterium infantis as a probiotic in preterm infants: a systematic review and meta-analysis Vamsi K Batta, Shripada C Rao, Sanjay K Patole, et al. Pediatr Res.

Evidence is emerging that beneficial effects of probiotics are species and strain specific. This systematic review analyses if B. infantis supplementation provides an advantage to preterm infants. This is the first systematic review evaluating the effects of probiotics containing B. infantis in preterm infants. The results of this systematic review provides indirect evidence that probiotics that include B. infantis may be more beneficial for preterm infants. These results will help in guiding future research and clinical practice for using B. infantis as a probiotic in preterm infants.

Prenatal brain maturation is delayed in neonates with congenital diaphragmatic hernia Sandy Johng, Daniel J Licht, Holly L Hedrick, et al. J Pediatr.

In this retrospective cohort study using data from a single-center clinical registry, the authors sought to assess brain development in fetuses with congenital diaphragmatic hernia (CDH) using a fetal Total Maturation Score (fTMS). Compared with healthy controls, neonates with CDH had a significant delay in fTMS. Placentas of neonates with CDH had a high proportion of fetal vascular malperfusion and chronic inflammation, and relatively large placentas had a protective effect on prenatal brain maturation. Prenatal brain maturation in neonates with CDH is delayed. The etiology and clinical impact of prenatal brain immaturity in neonates with CDH warrant further investigation.

Duration of simultaneous exposure to high-risk and lower-risk nephrotoxic antimicrobials in the neonatal intensive care unit (NICU) and future adolescent kidney health Andrew F Schiff, Danielle Deines, Elizabeth T Jensen, et al. J Pediatr.

In this prospective cohort study, the authors sought to determine whether greater duration of simultaneous exposure to antimicrobials with high nephrotoxicity risk combined with lower-risk antimicrobials (simultaneous exposure) in the NICU is associated with worse later kidney health in adolescents born preterm with VLBW. Despite frequent simultaneous exposure to high-risk combined with lower-risk nephrotoxic antimicrobials in the NICU, there were no clinically relevant associations with worse kidney health identified in adolescence. Although future studies are needed, these findings may provide reassurance in a population thought to be at increased risk of chronic kidney disease.

<u>Umbilical cord milking versus delayed cord clamping in infants 28 to 32 weeks: a randomized trial.</u> Anup Katheria, Jeff Szychowski, Waldemar A Carlo, et al. *Pediatrics*.

This multi-center non-inferiority randomized controlled trial compared umbilical cord milking in 1019 preterm infants born 28 to 32 weeks. For the primary outcome, infants randomized to umbilical cord milking developed severe IVH or died compared to 7 of 508 (1.4%) infants randomized to delayed cord clamping (rate difference 0.01%, 95% confidence interval: (-1.4% to 1.4%), P = .99). The authors concluded that umbilical cord milking may be a safe alternative to delayed cord clamping in premature infants born at 28 to 32 weeks who require resuscitation.

#### Preterm birth and infantile appendicitis.

Yakun Liu, Xiaoxiao Yu, Guoqing Zhang, et al. Pediatrics.

This retrospective, multi-center, matched case-control study included consecutive patients <1 year of age with surgery- or autopsy-confirmed appendicitis (n=106). For each case, 10 healthy infants were randomly selected and matched by age (n=1060). In multivariable analyses, preterm remained significantly associated with appendicitis (adjusted OR, 3.32; 95%CI, 1.76-6.24). However, preterm did not significantly influence the incidence of appendiceal perforation. The authors concluded that preterm infants have an increased risk of appendicitis during the first year of life and the preterm birth history may help improve the timely diagnosis of infantile appendicitis.

### <u>Granulocyte colony-stimulating factor is a determinant of severe bronchopulmonary</u> <u>dysplasia and coincident retinopathy</u>

Lakshanie C Wickramasinghe, Evelyn Tsantikos, Alida Kindt, et al. Am J Pathol.

A neonatal mouse hyperoxic model of coincident BPD and retinopathy was used to screen for candidate mediators, which revealed that granulocyte colony-stimulating factor (G-CSF) was up-regulated significantly in mouse lung lavage fluid and plasma at postnatal day 14 in response to hyperoxia. G-CSF-deficient neonatal pups showed significantly reduced alveolar simplification, normalized alveolar and airway resistance, and normalized weight gain compared with wild-type pups after hyperoxic lung injury. This was associated with a marked reduction in the intensity, and activation state, of neutrophilic and monocytic inflammation and its attendant oxidative stress response, and protection of lung endothelial cells. G-CSF deficiency also provided partial protection against ROP. The findings in this study implicate G-CSF as a pathogenic mediator of BPD and ROP, and suggest the therapeutic utility of targeting G-CSF biology to treat these conditions.

#### <u>Butyrate suppresses experimental necrotizing enterocolitis-induced brain injury in mice</u> Maribel Martinez, Wei Yu, Heather L Menden, et al. *Front Pediatr.*

In this study the authors hypothesize that NEC-induced brain injury would be suppressed by enteral butyrate supplementation. Mice were randomized into the following groups: control, NEC, butyrate pretreated NEC, and butyrate control. NEC scoring (1-4 with 4 representing severe injury) was performed on ileal sections using a validated scoring system. NEC-induced intestinal injury was attenuated by butyrate supplementation. NEC-induced microglial activation in the cerebral cortex and hippocampus was suppressed with butyrate. NEC increased the number of activated microglial cells but decreased the number of oligodendrocytes. Butyrate pretreatment attenuated these changes. Increased activation of proinflammatory Toll-like receptor signaling, cytokine expression, and induction of GFAP and IBA1 in the cerebral cortex observed with NEC was suppressed with butyrate. Experimental NEC induced inflammation and activation of microglia in several regions of the brain, most prominently in the cortex. NEC-induced neuroinflammation was suppressed with butyrate pretreatment. The addition of short-chain fatty acids to diet may be used to attenuate NEC-induced intestinal injury and

neuroinflammation in preterm infants.

# Assessing for prenatal risk factors associated with infant neurologic morbidity using a multivariate analysis

Samhita Jain, Scott Oltman, Elizabeth Rogers, et al. J Perinatol.

This study aims to characterize the biochemical and demographic profiles of pregnant people with maternal immune activation (MIA) and identify the prenatal characteristics associated with neurologic morbidity in offspring. This retrospective cohort study included 602 mother-infant dyads. Multivariable logistic regression was used to build a MIA vulnerability profile including mid-pregnancy biochemical and its relationship with infant neurologic morbidity was examined. The model identified three demographic and five inflammatory markers together identified 80% of infants with neurological morbidity. Inflammatory environment in mothers with pre-existing risk factors like obesity, poverty, and prematurity renders offspring more susceptible to neurologic morbidities.

An early prediction model for estimating bronchopulmonary dysplasia in preterm infants Yasemin Ezgi Kostekci, Batuhan Bakırarar, Emel Okulu, et al. *Neonatology.* 

This study investigates the potential risk factors for BPD and compares machine learning models for predicting the outcome of BPD/death on days 1, 7, 14, and 28 in preterm infants. Gestational age, birth weight, mode of respiratory support, intraventricular hemorrhage, necrotizing enterocolitis, surfactant requirement, and late-onset sepsis were risk factors on postnatal days 7, 14, and 28. In a comparison of four different time points (postnatal days 1, 7, 14, and 28), the day 7 model provided the best prediction. According to this model, when a patient was diagnosed with BPD/death, the accuracy rate was 89.5%.

#### Nirsevimab for prevention of hospitalizations due to RSV in infants

Simon B Drysdale, Katrina Cathie, Florence Flamein, et al. N Engl J Med.

This trial assessed the efficacy of nirsevimab in infants who are 12 months of age or younger, are born at a gestational age 29 weeks, and are entering their first RSV season. The infants received either a single injection of nirsevimab or standard care (no intervention). Compared to the standard care group, nirsevimab had an efficacy of 83.2% (95% confidence interval [CI], 67.8 to 92.0; P<0.001) for primary outcome of hospitalization for RSV. Nirsevimab had an efficacy of 75.7% (95% CI, 32.8 to 92.9; P = 0.004) for secondary outcome of very severe RSV-associated lower respiratory tract infection defined as hospitalization for RSV, with hypoxemia, and need for supplemental oxygen.

Short, medium, and long deferral of umbilical cord clamping compared with umbilical cord milking and immediate clamping at preterm birth: a systematic review and network meta-analysis with individual participant data

Anna Lene Seidler, Sol Libesman, Kylie E Hunter, et al. Lancet.

This is a systematic review/meta-analysis comparing post-delivery umbilical cord strategies on primary outcome of death before discharge. Interventions were grouped into immediate clamping, short deferral ( $\geq$ 15 s to <45 s), medium deferral ( $\geq$ 45 s to <120 s), long deferral ( $\geq$ 120 s), and intact cord milking. The review and analysis included data from 47 trials with 6094 participants. Long deferral reduced death before discharge the most (compared with immediate clamping; odds ratio 0.31 [95% credibility interval] 0.11–0.80; moderate certainty).

## **OTHER NOTEWORTHY PUBLICATIONS – December 2023**

# COVID-19

Safety and benefits of COVID-19 vaccination in pregnancy—implications for the maternal vaccination platform <a href="https://pubmed.ncbi.nlm.nih.gov/37870867/">https://pubmed.ncbi.nlm.nih.gov/37870867/</a>

Newborn and early infant outcomes following maternal COVID-19 vaccination during pregnancy <a href="https://pubmed.ncbi.nlm.nih.gov/37870875/">https://pubmed.ncbi.nlm.nih.gov/37870875/</a>

Maternal perceived stress and infant behavior during the COVID-19 pandemic <u>https://pubmed.ncbi.nlm.nih.gov/37500757/</u>

# **Pediatrics**

Clinician management practices for infants with hypothermia in the emergency department <u>https://pubmed.ncbi.nlm.nih.gov/38009075</u>

Umbilical cord milking versus delayed cord clamping in infants 28 to 32 weeks: A randomized trial <u>https://pubmed.ncbi.nlm.nih.gov/37941523</u>

Preterm birth and infantile appendicitis

https://pubmed.ncbi.nlm.nih.gov/38018230

Diabetes in pregnancy, neonatal morbidities, and early growth in moderate or late preterm infants <u>https://pubmed.ncbi.nlm.nih.gov/37969002</u>

Supporting the family after the death of a child or adolescent

https://pubmed.ncbi.nlm.nih.gov/38009001

Fecal microbiota transplantation: Information for the pediatrician

https://pubmed.ncbi.nlm.nih.gov/37981872

Risk of developmental disorders in children born at 32 to 38 weeks' gestation: A meta-analysis <u>https://pubmed.ncbi.nlm.nih.gov/37946609</u>

Transcutaneous bilirubin accuracy before, during, and after phototherapy: A meta-analysis <u>https://pubmed.ncbi.nlm.nih.gov/37990609</u>

A quality improvement initiative to reduce necrotizing enterocolitis in very preterm infants <u>https://pubmed.ncbi.nlm.nih.gov/37920940</u>

# Journal of Pediatrics

Is there prognostic discordance for infants with neurological conditions between physicians and parents?

https://pubmed.ncbi.nlm.nih.gov/37890554/

Worldwide newborn screening and early immunizations: aligning advances in preventive pediatrics <a href="https://pubmed.ncbi.nlm.nih.gov/37726086/">https://pubmed.ncbi.nlm.nih.gov/37726086/</a>

Prenatal brain maturation is delayed in neonates with congenital diaphragmatic hernia <u>https://pubmed.ncbi.nlm.nih.gov/37722557/</u>

A randomized controlled trial of a neonatal intensive care unit language intervention for parents of preterm infants and 2-year language outcomes

https://pubmed.ncbi.nlm.nih.gov/37717908/

Management strategies for congenital heart disease comorbid with airway anomalies in children <a href="https://pubmed.ncbi.nlm.nih.gov/37726085/">https://pubmed.ncbi.nlm.nih.gov/37726085/</a>

Duration of simultaneous exposure to high-risk and lower-risk nephrotoxic antimicrobials in the neonatal intensive care unit (NICU) and future adolescent kidney health

https://pubmed.ncbi.nlm.nih.gov/37722552/

Preschool mathematics and literacy skills and educational attainment in adolescents born preterm and full term

https://pubmed.ncbi.nlm.nih.gov/37722555/

Early elbow flexion contracture predicts shoulder contracture in infants with brachial plexus birth injury <a href="https://pubmed.ncbi.nlm.nih.gov/37717907/">https://pubmed.ncbi.nlm.nih.gov/37717907/</a>

The irritable infant in the neonatal intensive care unit: risk factors and biomarkers of gastroesophageal reflux disease

https://pubmed.ncbi.nlm.nih.gov/37777170/

Inconsistency between pictures on baby diaper packaging in Europe and safe infant sleep recommendations

https://pubmed.ncbi.nlm.nih.gov/37778411/

Health-related quality of life for parents of infants with bronchopulmonary dysplasia https://pubmed.ncbi.nlm.nih.gov/37839508/

Blood pressure outcomes in NICU-admitted infants with neonatal hypertension: a pediatric nephrology research consortium study

https://pubmed.ncbi.nlm.nih.gov/37778410/

### Pediatric Research

Neonatal encephalopathy and hypoxic-ischemic encephalopathy: moving from controversy to consensus definitions and subclassification

https://pubmed.ncbi.nlm.nih.gov/37573378/

Neonatal platelet transfusions: more than meets the eye

https://pubmed.ncbi.nlm.nih.gov/37558725/

Bifidobacterium infantis as a probiotic in preterm infants: a systematic review and meta-analysis <a href="https://pubmed.ncbi.nlm.nih.gov/37460707/">https://pubmed.ncbi.nlm.nih.gov/37460707/</a>

Human preterm colostrum stimulates outgrowth in neurogenic tissue

https://pubmed.ncbi.nlm.nih.gov/37433903/

Therapeutic efficacy of intravenous infusion of mesenchymal stem cells in rat perinatal brain injury <a href="https://pubmed.ncbi.nlm.nih.gov/37422495/">https://pubmed.ncbi.nlm.nih.gov/37422495/</a>

The effect of imposed resistance in neonatal resuscitators on pressure stability and peak flows: a bench test

https://pubmed.ncbi.nlm.nih.gov/37460710/

Interaction of hydrocortisone and illness severity on head growth in cohort of ELBW infants <a href="https://pubmed.ncbi.nlm.nih.gov/37340101/">https://pubmed.ncbi.nlm.nih.gov/37340101/</a>

Impact of postnatal steroids on peripheral avascular retina and severity of retinopathy of prematurity <a href="https://pubmed.ncbi.nlm.nih.gov/37291231/">https://pubmed.ncbi.nlm.nih.gov/37291231/</a>

Changes in inflammatory proteins following platelet transfusion in a neonatal population <u>https://pubmed.ncbi.nlm.nih.gov/37443343/</u>

Oscillatory mechanics trajectory in very preterm infants: a cohort study <a href="https://pubmed.ncbi.nlm.nih.gov/37452113/">https://pubmed.ncbi.nlm.nih.gov/37452113/</a>

Gestational age-specific clinical correlates of acute kidney injury in preterm infants with necrotizing enterocolitis

https://pubmed.ncbi.nlm.nih.gov/37454184/

Inflammation, sepsis severity and neurodevelopmental outcomes of late-onset sepsis in preterm neonates

https://pubmed.ncbi.nlm.nih.gov/37468719/

A simple scoring system for prediction of IVH in very-low-birth-weight infants <u>https://pubmed.ncbi.nlm.nih.gov/37479747/</u>

Antibody deficiencies in children are associated with prematurity and a family history of infections <u>https://pubmed.ncbi.nlm.nih.gov/37491587/</u>

Longitudinal pilot study of oxygen saturation indices in healthy preterm infants https://pubmed.ncbi.nlm.nih.gov/37542167/

Intravenous immunoglobulin G therapy for neonatal hyperbilirubinemia <u>https://pubmed.ncbi.nlm.nih.gov/37491586/</u>

Archives of Disease in Childhood - Fetal & Neonatal Edition

No new articles

Journal of Perinatology

Alloimmune hemolytic disease of the fetus and newborn: genetics, structure, and function of the commonly involved erythrocyte antigens

https://www.ncbi.nlm.nih.gov/pubmed/37848604

Shift-to-shift handoffs in the NICU: lessons learned from a large scale audit <u>https://www.ncbi.nlm.nih.gov/pubmed/37452115</u>

Low inflating pressures during neonatal tidal volume targeted ventilation: occurrence and significance

https://www.ncbi.nlm.nih.gov/pubmed/37156905

Endoscopic evaluation of neonates with signs of upper airway obstruction in the neonatal unit of a tertiary hospital

https://www.ncbi.nlm.nih.gov/pubmed/37816803

Assessing for prenatal risk factors associated with infant neurologic morbidity using a multivariate analysis

https://www.ncbi.nlm.nih.gov/pubmed/37950045

Collaborative efforts to improve genetic testing in the neonatal intensive care unit <a href="https://www.ncbi.nlm.nih.gov/pubmed/37914812">https://www.ncbi.nlm.nih.gov/pubmed/37914812</a>

**Neonatology** 

Effects of catecholamines on blood flow in preterm infants: a subanalysis of PICC-MBF trial <a href="https://www.ncbi.nlm.nih.gov/pubmed/37660690">https://www.ncbi.nlm.nih.gov/pubmed/37660690</a>

Trends in preterm body composition and neurodevelopmental outcomes after discharge <a href="https://www.ncbi.nlm.nih.gov/pubmed/37673056">https://www.ncbi.nlm.nih.gov/pubmed/37673056</a>

Quality of life at a 10-year follow-up of children born preterm with post-hemorrhagic ventricular dilatation: a cohort study

https://www.ncbi.nlm.nih.gov/pubmed/37678198

Association of maternal cigarette smoking with neonatal death: a population-based cohort study

https://www.ncbi.nlm.nih.gov/pubmed/37573777

An early prediction model for estimating bronchopulmonary dysplasia in preterm infants <u>https://pubmed.ncbi.nlm.nih.gov/37725910</u>

Morbidity and mortality of very-low-birthweight twin infants according to their sex and the sex of the co-twin: a retrospective cohort study

https://www.ncbi.nlm.nih.gov/pubmed/37619541

The effect of postnatal cytomegalovirus infection on (micro)structural cerebral development in very preterm infants at term-equivalent age

https://www.ncbi.nlm.nih.gov/pubmed/37634498

Point-of-care ultrasound versus chest x-ray for determining lung expansion based on rib count in high-frequency oscillatory ventilation

https://www.ncbi.nlm.nih.gov/pubmed/37634488

Time of delivery contributes to mortality and morbidity in preterm infants https://www.ncbi.nlm.nih.gov/pubmed/37757770

Effects of milrinone on neonates after patent ductus arteriosus ligation: a retrospective nationwide database study

https://www.ncbi.nlm.nih.gov/pubmed/37757762

Placental histologic abnormalities and 2-year outcomes in neonatal hypoxic-ischemic encephalopathy

https://www.ncbi.nlm.nih.gov/pubmed/37742617

Microstructural brain development and neurodevelopmental outcome of very preterm infants of mothers with gestational diabetes mellitus

https://www.ncbi.nlm.nih.gov/pubmed/37643585

Clinical prediction models and predictors for death or adverse neurodevelopmental outcome in term newborns with hypoxic-ischemic encephalopathy: a systematic review of the literature

https://www.ncbi.nlm.nih.gov/pubmed/37536297

American Journal of Perinatology

Combined anticoagulant therapy for prevention of preeclampsia and small for gestational age neonates: a systematic review and meta-analysis

https://pubmed.ncbi.nlm.nih.gov/35235957/

Association of antenatal corticosteroid exposure and infant survival at 22 and 23 weeks https://pubmed.ncbi.nlm.nih.gov/34839472/

Idiopathic polyhydramnios and neonatal morbidity at term

https://pubmed.ncbi.nlm.nih.gov/34775584/

Journal of Neonatal-Perinatal Medicine

No new articles

Maternal Health, Neonatology and Perinatology

The use of projected autonomy in antenatal shared decision-making for periviable neonates: a qualitative study

https://pubmed.ncbi.nlm.nih.gov/38037157

Maternal education and its association with maternal and neonatal adverse outcomes in live births conceived using medically assisted reproduction (MAR)

https://pubmed.ncbi.nlm.nih.gov/38037147

**Neoreviews** 

Potential adjuncts to therapeutic hypothermia to mitigate multiorgan injury in perinatal hypoxiaischemia

https://pubmed.ncbi.nlm.nih.gov/38036441

Pharmacologic adjuncts for neonatal tracheal intubation: The evidence behind premedication https://pubmed.ncbi.nlm.nih.gov/38036442

Response to the rapeutic interventions in the NICU: Role of sex as a biological variable https://pubmed.ncbi.nlm.nih.gov/38036443

A newborn with cardiac arrest and abdominal distention

https://pubmed.ncbi.nlm.nih.gov/38036444

Rash at birth in a preterm neonate

https://pubmed.ncbi.nlm.nih.gov/38036446

An infant with thickened and hyperechoic main pulmonary artery

https://pubmed.ncbi.nlm.nih.gov/38036445

Fetal tachyarrhythmia: A tale of two presentations

https://pubmed.ncbi.nlm.nih.gov/38036448

An infant with an unusual location of a peripherally inserted central catheter

https://pubmed.ncbi.nlm.nih.gov/38036447

Congenital bilateral branch pulmonary artery hypoplasia: Prenatal diagnosis and parental counseling <u>https://pubmed.ncbi.nlm.nih.gov/38036449</u>

JAMA Pediatrics

Antibiotic use among infants admitted to neonatal intensive care units <u>https://pubmed.ncbi.nlm.nih.gov/37812442/</u>

**BMC Pediatrics** 

Applications of indocyanine greenenhanced fluorescence in the laparoscopic treatment of colonic stricture after necrotizing enterocolitis

https://pubmed.ncbi.nlm.nih.gov/38102599/

A cross-sectional study on stool- and gastrointestinal-related outcomes of Mexican infants consuming different formulae

https://pubmed.ncbi.nlm.nih.gov/38102583/

Investment case for small and sick newborn care in Tanzania: systematic analyses

https://pubmed.ncbi.nlm.nih.gov/38098013/

The effect of the swaddling method on stress levels in newborns administered nasal CPAP <a href="https://pubmed.ncbi.nlm.nih.gov/38087248/">https://pubmed.ncbi.nlm.nih.gov/38087248/</a>

Effectiveness and safety of intracardiac electrocardiogram guidance for epicutaneo-cava catheters via the lower extremity in preterm infants: a retrospective study

https://pubmed.ncbi.nlm.nih.gov/38071296/

Retrospective cohort study of neonatal blood transfusion in China https://pubmed.ncbi.nlm.nih.gov/38066456/

The impact of the baby friendly hospital initiative on healthcare utilization among newborns insured by Medicaid in Delaware

https://pubmed.ncbi.nlm.nih.gov/38049756/

Characteristics of neonatal hypoxic-ischemic encephalopathy at high altitude and early results of therapeutic hypothermia

https://pubmed.ncbi.nlm.nih.gov/38037071/

Pediatric Critical Care Medicine

Center volume and survival relationship for neonates with congenital diaphragmatic hernia treated with extracorporeal life support

https://pubmed.ncbi.nlm.nih.gov/37346002/

Amplitude integrated electroencephalography: simulated assessment of neonatal seizure detection in PICU patients

https://pubmed.ncbi.nlm.nih.gov/38055290/

New England Journal of Medicine

Nirsevimab for prevention of hospitalizations due to RSV in infants <a href="https://pubmed.ncbi.nlm.nih.gov/38157500/">https://pubmed.ncbi.nlm.nih.gov/38157500/</a>

<u>Lancet</u>

Impact of discontinuing oxytocin in active labour on neonatal morbidity: an open-label, multicentre, randomised trial

https://pubmed.ncbi.nlm.nih.gov/37952548/

Deferred cord clamping, cord milking, and immediate cord clamping at preterm birth: a systematic review and individual participant data meta-analysis

https://pubmed.ncbi.nlm.nih.gov/37977169/

Short, medium, and long deferral of umbilical cord clamping compared with umbilical cord milking and immediate clamping at preterm birth: a systematic review and network meta-analysis with individual participant data

https://pubmed.ncbi.nlm.nih.gov/37977170/

<u>JAMA</u>

Neonatal survival after serial amnioinfusions for bilateral renal agenesis: the renal anhydramnios fetal therapy trial

https://pubmed.ncbi.nlm.nih.gov/38051327/

<u>BMJ</u> No new articles

Pediatric Infectious Disease Journal

Perinatal and other risk factors for common infections in infancy: a prospective cohort study <a href="https://pubmed.ncbi.nlm.nih.gov/37751622/">https://pubmed.ncbi.nlm.nih.gov/37751622/</a>

Pediatric Cardiology No new content

### Pediatric Neurology

The clinical characteristics and outcomes of infantile seizures in the first year of life: a single-center study

https://pubmed.ncbi.nlm.nih.gov/37931500/

Long-term video electroencephalographic monitoring in <30-week gestational age infants with highgrade intraventricular hemorrhage

https://pubmed.ncbi.nlm.nih.gov/37952260/

Subpial hemorrhage in extremely premature neonate: a rare finding in a rare cohort <u>https://pubmed.ncbi.nlm.nih.gov/37925768/</u>

The effect of disease on the developing nervous system: challenges and opportunities, a foreward <a href="https://pubmed.ncbi.nlm.nih.gov/37979303/">https://pubmed.ncbi.nlm.nih.gov/37979303/</a>

Obstetrics and Gynecology

Obstetric intervention and perinatal outcomes during the coronavirus disease 2019 (COVID-19) pandemic

https://pubmed.ncbi.nlm.nih.gov/37826851/

Perinatal outcomes associated with management of stage 1 hypertension <a href="https://pubmed.ncbi.nlm.nih.gov/37769314/">https://pubmed.ncbi.nlm.nih.gov/37769314/</a>

American Journal of Obstetrics & Gynecology

Placental fetal vascular malperfusion, neonatal neurologic morbidity, and infant neurodevelopmental outcomes: a systematic review and meta-analysis

https://pubmed.ncbi.nlm.nih.gov/37315755/

Addressing a broken drug pipeline for preterm birth: why early preterm birth is an orphan disease <u>https://pubmed.ncbi.nlm.nih.gov/37516401/</u>

Timing of antenatal corticosteroids and survival without neurologic disabilities at 5½ years in children born before 35 weeks of gestation

https://pubmed.ncbi.nlm.nih.gov/37394223/

Fetal growth restriction and small for gestational age as predictors of neonatal morbidity: which growth nomogram to use?

https://pubmed.ncbi.nlm.nih.gov/37348779/

**Hospital Pediatrics** 

No relevant articles

#### **BASIC SCIENCE SELECTIONS**

Irisin alleviates hyperoxia-induced bronchopulmonary dysplasia through activation of Nrf2/HO-1 pathway

https://www.ncbi.nlm.nih.gov/pubmed/37804931

Conditional knockout of ITGB4 in bronchial epithelial cells directs bronchopulmonary dysplasia

https://www.ncbi.nlm.nih.gov/pubmed/37698050

Granulocyte colony-stimulating factor is a determinant of severe bronchopulmonary dysplasia and coincident retinopathy

https://www.ncbi.nlm.nih.gov/pubmed/37673326

Regulating NLRP3 inflammasome-induced pyroptosis via Nrf2: TBHQ limits hyperoxiainduced lung injury in a mouse model of bronchopulmonary dysplasia https://www.ncbi.nlm.nih.gov/pubmed/37556072

Butyrate suppresses experimental necrotizing enterocolitis-induced brain injury in mice <u>https://www.ncbi.nlm.nih.gov/pubmed/38130941</u>

Active polypeptide MDANP protect against necrotizing enterocolitis (NEC) by regulating the PERK-eIF2a-QRICH1 axis

https://www.ncbi.nlm.nih.gov/pubmed/38129421

IL1R2 promotes retinal angiogenesis to participate in retinopathy of prematurity by activating the HIF1alpha/PFKFB3 pathway

https://www.ncbi.nlm.nih.gov/pubmed/38097102

Effects of fresh bone marrow mononuclear cell therapy in rat model of retinopathy of prematurity

https://www.ncbi.nlm.nih.gov/pubmed/37334242

ADDITIONAL JOURNAL SELECTIONS

Family integrated care shortens the duration of home oxygen therapy in infants with bronchopulmonary dysplasia

https://www.ncbi.nlm.nih.gov/pubmed/38113903

Effect of acute histologic chorioamnionitis on bronchopulmonary dysplasia and mortality rate among extremely low gestational age neonates: A retrospective case-control study <a href="https://www.ncbi.nlm.nih.gov/pubmed/38108543">https://www.ncbi.nlm.nih.gov/pubmed/38108543</a>

Association between plasma lysophosphatidic acid levels and bronchopulmonary dysplasia in extremely preterm infants: A prospective study

https://www.ncbi.nlm.nih.gov/pubmed/37712600

Variables related to bronchopulmonary dysplasia severity: a Six-Year retrospective study <u>https://www.ncbi.nlm.nih.gov/pubmed/37580063</u>

The association between bronchopulmonary dysplasia grade and risks of adverse neurodevelopmental outcomes among preterm infants born at less than 30 weeks of gestation

https://www.ncbi.nlm.nih.gov/pubmed/36642443

Hyponatremia as a marker for predicting surgical intervention in necrotizing enterocolitis: a retrospective cohort study

https://www.ncbi.nlm.nih.gov/pubmed/38064977

\*\*Primary anastomosis versus stoma for surgical necrotizing enterocolitis in us childre's hospitals

https://www.ncbi.nlm.nih.gov/pubmed/38056356

SNAPPE-II and MDAS scores as predictors for surgical intervention in very low birth weight neonates with necrotizing enterocolitis

https://www.ncbi.nlm.nih.gov/pubmed/36404433

Volumetric changes in brain MRI of infants with hypoxic-ischemic encephalopathy and abnormal neurodevelopment who underwent therapeutic hypothermia

https://www.ncbi.nlm.nih.gov/pubmed/38101694

A novel clinical risk scoring system for neurodevelopmental outcomes among survivors of neonatal hypoxic-ischemic encephalopathy (HIE)

https://www.ncbi.nlm.nih.gov/pubmed/38057259

The Use of Cerebral Near-Infrared Spectroscopy in Neonatal Hypoxic-Ischemic

Encephalopathy: A Systematic Review of the Literature

https://www.ncbi.nlm.nih.gov/pubmed/38038671

Five-year visual outcome of treatment for retinopathy of prematurity in infants weighing less than 500 g at birth: A multicenter cohort study from J-CREST

https://www.ncbi.nlm.nih.gov/pubmed/38064668

Neurodevelopmental outcomes in infants screened for retinopathy of prematurity <u>https://www.ncbi.nlm.nih.gov/pubmed/37883103</u>

Erythrocyte transfusions are associated with retinopathy of prematurity in extremely low gestational age newborns

https://www.ncbi.nlm.nih.gov/pubmed/37667535

Postnatal Myelomeningocele Repair in the United States: Rates and Disparities Before and After the Management of Myelomeningocele Study Trial <u>https://www.ncbi.nlm.nih.gov/pubmed/37477441</u>