# **Publications Working Group**

Ayan Rajgarhia, Page Editor - Children's Hospital of Orange County Craig Nankervis - Nationwide Children's Hospital Christopher Rouse - Mass General Brigham Vineet Lamba - Sutter Medical Center Sacramento Zeyar Htun - NYC Long Island School of Medicine L. Corbin Downey - Atrium Health Wake Forest Baptist



Section on reconstant remarks interience

# **ARTICLES OF INTEREST – May 2025**

Effectiveness of nirsevimab immunoprophylaxis against respiratory syncytial virus-related outcomes in hospital care settings: a seasonal cohort study of infants in Catalonia, Spain Aida Perramon-Malavez, Eduardo Hermosilla, Ermengol Coma, et al. *Pediatr Infect Dis J* 

This is a seasonal retrospective cohort study of infants who were born during the RSV season (October to January) and compared them to those born during the "catch-up" cohort (April to September) assessing the effectiveness of nirsevimab. The study outcomes assessed were: hospital emergency visits, hospital admission or pediatric intensive care unit (PICU) admission due to RSV-associated or all-causes bronchiolitis-death. The study showed a dose of nirsevimab led to a significant reduction of 74% and 85% in hospitalizations and PICU admissions due to RSV bronchiolitis.

Association between early pulmonary arterial pressure measurements and bronchopulmonary dysplasia or mortality in very preterm infants: a prospective cohort study

Mustafa Senol Akin, Gökce Kas, Emre Aydin, et al. Arch Dis Child Fetal Neonatal Ed

A prospective observational cohort study investigated the association between early pulmonary arterial pressure measurements and bronchopulmonary dysplasia (BPD) or mortality in very preterm infants. The study involved 329 infants born at less than 32 weeks gestation who underwent echocardiography within the first 7 days of life. It was found that moderate-to-severe pulmonary hypertension, defined as pulmonary arterial pressure exceeding 25 mm Hg, was present in 24% of these infants. The research concluded that moderate-to-severe pulmonary hypertension was independently associated with a significantly increased risk of bronchopulmonary dysplasia or mortality, with an adjusted odds ratio (aOR) of 2.52 (95% confidence interval [CI] 1.48-4.29; P < 0.001). This suggests that early pulmonary artery pressure measurements could serve as a potential risk factor for adverse outcomes in this vulnerable population.

<u>Delivery room dextrose gel for preterm hypoglycaemia (the GEHPPI study): a randomised placebo-</u> controlled trial

Graham King, Julie Sloan, Peter Duddy, et al. *Arch Dis Child Fetal Neonatal Ed*Randomized, blinded, placebo-controlled trial investigating whether the administration of buccal dextrose gel in the delivery room could reduce early hypoglycemia in very or extremely preterm infants. The study analyzed 169 infants≤32+0 weeks gestational age (GA), infants were randomised to 40% dextrose or placebo gel in the delivery room. The trial found no significant difference in the frequency of hypoglycemia between the dextrose and placebo groups upon admission to the Neonatal Intensive Care Unit (NICU). The study concluded that there was no evidence of benefit from 40% dextrose gel in reducing hypoglycemia rates at NICU admission. Therefore, the management of vulnerable newborns should continue to prioritize establishing vascular access and initiating dextrose-containing intravenous fluids as early as possible.

Necrotizing enterocolitis: specific human milk oligosaccharides prevent enteric glia loss and hypomotility

Necrotizing enterocolitis (NEC) is mediated by toll-like receptor 4 (TLR4)-induced inflammation and is preceded by reduced intestinal motility. Human milk oligosaccharides (HMOs) are non-digestible components of breast milk that prevent NEC in preclinical models. We now hypothesize that HMOs can reduce the risk of NEC through restoration of intestinal motility and reduced TLR4-mediated inflammation. Mice with induced NEC were administered either 2'-FL (5 g/L), 6'-SL (5 g/L), or a blend of 5 specific HMOs (5 g/L) containing 2'-FL (2.606 g/L), 3'-FL (0.652 g/L), LNT (1.304 g/L), 3'-SL (0.174 g/L), and 6'-SL (0.260 g/L). Administration of either 2'-FL, 6'-SL, or HMO blend significantly attenuated NEC severity and reversed intestinal hypomotility. HMOs prevented enteric glia loss and regulated key genes critical for enteric glia maintenance, attenuated pro-apoptotic genes, and increased anti-apoptotic genes in vitro, resulting in a reduction in apoptosis. HMOs protect against NEC at least in part through protective effects on inflammation and the enteric nervous system.

The anti-inflammatory peptide RLS-0071 reduces immune cell recruitment and oxidative damage in a neonatal rat model of hypoxic ischemic encephalopathy (HIE)

There are no approved pharmacological interventions to treat inflammatory responses in infants affected by hypoxic ischemic encephalopathy (HIE). Novel pharmacotherapeutics that interrupt immune-mediated brain inflammation in HIE represents a promising target for intervention. This study tested the hypothesis that a novel anti-inflammatory peptide, RLS-0071 (pegtarazimod), could modulate neuroinflammation in a neonatal rat model of HIE. Rat pups subject to hypoxia-ischemic brain insult received 3 interventions: normothermia, hypothermia, and RLS-0071. Histopathological effects were assessed via fluorescence microscopy of the hypoxic-ischemic

induced cerebral infarct in the cortex at 24 hours and 48 hours after controlled oxygen deprivation. Increased surviving neurons were seen at 48 hours for RLS-0071 treatment compared with hypothermia treatment as assessed by neuronal nuclear protein (NeuN) staining. Ionized calciumbinding adaptor molecule 1 (Iba1)-positive microglial recruitment was reduced by 4-fold in RLS-0071 treatment or hypothermia treated rats between 24 hours and 48 hours, compared to normothermia controls. The findings suggest that RLS-0071 decreases immune cell recruitment and oxidative damage to levels comparable to therapeutic hypothermia in an animal model of HIE.

Are early, frequent echocardiograms necessary to improve outcomes of neonates with congenital diaphragmatic hernia?

The authors sought to determine if timing of first postnatal echocardiogram (ECHO), early vs delayed, affects the use of extracorporeal membrane oxygenation (ECMO) and survival to discharge in neonates with congenital diaphragmatic hernia (CDH). They retrospectively reviewed 306 neonates with CDH managed between January 2007 through December 2023 and compared 2 ECHO cohorts: early (<24 hours, 2007-2015) vs delayed (>24 hours, 2016-2023). They found that a delay in the timing of the initial postnatal ECHO for critically ill neonates with CDH, as part of a broader series of guideline changes, was associated with less ECMO, improved survival, and lower use of inhaled nitric oxide and vasoactive drugs despite similar ECHO measures of pulmonary hypertension, ventricular size, and ventricular function. They suggest that randomized studies are needed to define better the optimal timing and interventions related to the initial ECHO for CDH.

Hemodynamic risk factors for cerebellar hemorrhage presence and volume in infants born very <u>preterm</u>

The authors sought to examine among infants born very preterm the role of hemodynamic disturbances in the occurrence of cerebellar hemorrhage (CbH) and whether cardiovascular instability is associated with larger CbH volume. In this prospective, longitudinal, multisite cohort study, early-life and/or term-equivalent age brain magnetic resonance imaging were performed in 309 very preterm infants admitted to 3 tertiary-level neonatal intensive care units. Hypotension treated with inotropes is shown to be an independent risk factor for the presence of CbH as well as for larger CbH volume. These results reinforce the importance of hemodynamics stability, especially an appropriate management of hypotension to prevent CbH and therefore improve neurodevelopmental outcomes among infants born very preterm.

Comparative study between nebulized and intravenous magnesium sulfate for treatment of persistent pulmonary hypertension in neonates

Nashwa Farouk Mohamed, Osama Abu El Fetouh Zaki El Feky, Heba Morsy Saad El Din El Ganady, et al. *J Neonatal Perinatal Med* 

This non-randomized controlled study included 40 infants who were mechanically ventilated neonates with severe PPHN at a single institution. Neonates were divided into two groups: one received nebulized MgSO4 (NebMag, n = 20) and the other intravenous MgSO4 (IVMag, n = 20). Both groups demonstrated improvements in oxygenation and ventilatory parameters. However, after 24 hours, the NebMag group had a significantly lower oxygenation index (19.75 ± 2.9 vs 22.1 ± 2.19, p = 0.032) and higher PaO2 (69.45 ± 7.56 mmHg vs 60.75 ± 5.9 mmHg, p = 0.008). Mean arterial pressure was significantly higher in the NebMag group at all time points. Serum magnesium levels were significantly lower in the NebMag group at 12 hours (3.6 ± 0.18 vs 1.2 ± 0.17 mmol/L, p < 0.001). The authors concluded that nebulized MgSO4 may offer a safer alternative to intravenous administration, providing effective pulmonary vasodilation with fewer systemic side effects in neonates with PPHN.

Cord blood treatment for children with cerebral palsy: individual participant data meta-analysis Megan Finch-Edmondson, Madison C B Paton, Annabel Webb, et al. *Pediatrics* 

This meta-analysis included 498 participant data records from 11 studies. Analysis of 170 participants treated with Umbilical Cord Blood (UCB) and 171 controls demonstrated UCB increased mean Gross Motor Function Measure (GMFM)-66 score compared with controls by 1.36 points at 6 months (95% CI, 0.41-2.32; P = .005) and 1.42 at 12 months (95% CI, 0.31-2.52; P = .012). Mean GMFM-66 effect size increased with increasing cell dose at 3 (P < .001) and 12 months (P = .047). Cerebral palsy severity and baseline age were associated with GMFM-66 effect size. The rate of serious adverse events was similar between groups. The authors concluded that UCB is safe and provides benefit for improving gross motor function in some children with cerebral palsy, with higher doses associated with increased effect size.

# OTHER NOTEWORTHY PUBLICATIONS - May 2025

#### **Pediatrics**

The incidence of neonatal herpes simplex virus infections in the United States: 2019 <a href="https://pubmed.ncbi.nlm.nih.gov/40222742">https://pubmed.ncbi.nlm.nih.gov/40222742</a>

Adaptive functioning development in infants with agenesis of the corpus callosum <a href="https://pubmed.ncbi.nlm.nih.gov/40169151">https://pubmed.ncbi.nlm.nih.gov/40169151</a>

Cord blood treatment for children with cerebral palsy: individual participant data meta-analysis <a href="https://pubmed.ncbi.nlm.nih.gov/40210215">https://pubmed.ncbi.nlm.nih.gov/40210215</a>

Hypothermia and adverse outcomes in very preterm infants: a systematic review <a href="https://pubmed.ncbi.nlm.nih.gov/40262762">https://pubmed.ncbi.nlm.nih.gov/40262762</a>

Improving delayed cord clamping across Tennessee through a statewide quality collaborative <a href="https://pubmed.ncbi.nlm.nih.gov/40228818">https://pubmed.ncbi.nlm.nih.gov/40228818</a>

Clinical report: Patent ductus arteriosus in preterm infants <a href="https://pubmed.ncbi.nlm.nih.gov/40288780">https://pubmed.ncbi.nlm.nih.gov/40288780</a>

### **Journal of Pediatrics**

Balancing volume and outcomes: insights and cautions from a multistate analysis of care for infants born very preterm

https://pubmed.ncbi.nlm.nih.gov/39864501/

An mhealth intervention to support psychosocial well-being of racial and ethnically diverse families in the neonatal intensive care unit

https://pubmed.ncbi.nlm.nih.gov/39880156/

Outcomes of patent ductus arteriosus closure by availability of cardiac surgeons for infants born preterm

https://pubmed.ncbi.nlm.nih.gov/39889901/

Quantitative magnetic resonance cerebrospinal fluid flow properties and neurocognitive outcomes in congenital heart disease

https://pubmed.ncbi.nlm.nih.gov/39909202/

How neonatologists use genetic information

https://pubmed.ncbi.nlm.nih.gov/39909202/

Bifidobacterium and lactobacillus bacteremia among infants receiving probiotics in the neonatal intensive care unit

https://pubmed.ncbi.nlm.nih.gov/39984117/

### **Pediatric Research**

Using heart rate variability to predict neurological outcomes in preterm infants: a scoping review <a href="https://pubmed.ncbi.nlm.nih.gov/39369103/">https://pubmed.ncbi.nlm.nih.gov/39369103/</a>

Neonatal intracranial pathologies on ultrasound imaging in sub-Saharan Africa: a systematic review and meta-analysis

https://pubmed.ncbi.nlm.nih.gov/39663426/

Model-based characterization of total serum bilirubin dynamics in preterm infants <a href="https://pubmed.ncbi.nlm.nih.gov/39511443/">https://pubmed.ncbi.nlm.nih.gov/39511443/</a>

Efficacy and safety of three antiseptics for neonatal skin disinfection: a cohort study <a href="https://pubmed.ncbi.nlm.nih.gov/39516574/">https://pubmed.ncbi.nlm.nih.gov/39516574/</a>

Comparison of BiliCocoon phototherapy with overhead phototherapy in hyperbilirubinemic neonates. A randomized clinical trial

https://pubmed.ncbi.nlm.nih.gov/39489832/

Point-of-care procalcitonin trends in suspected neonatal late-onset infection: a prospective observational study

https://pubmed.ncbi.nlm.nih.gov/39455860/

Remote ischemic post-conditioning for neonatal encephalopathy: a safety and feasibility trial <a href="https://pubmed.ncbi.nlm.nih.gov/39396091/">https://pubmed.ncbi.nlm.nih.gov/39396091/</a>

Prenatal diagnosis of tracheo-oesophageal fistula/oesophageal atresia: is MRI helpful? <a href="https://pubmed.ncbi.nlm.nih.gov/39210049/">https://pubmed.ncbi.nlm.nih.gov/39210049/</a>

Impact of Kangaroo mother care on autonomic cardiovascular control in foetal-growth-restricted preterm infants

https://pubmed.ncbi.nlm.nih.gov/39242939/

Clinical correlates of a high cardiorespiratory risk score for very low birth weight infants <a href="https://pubmed.ncbi.nlm.nih.gov/39300276/">https://pubmed.ncbi.nlm.nih.gov/39300276/</a>

Impact of daily music on comfort scores in preterm infants: a randomized controlled trial <a href="https://pubmed.ncbi.nlm.nih.gov/39313555/">https://pubmed.ncbi.nlm.nih.gov/39313555/</a>

Lactation-focused audio relaxation versus standard care for mothers of very preterm infants (the EXPRESS randomised clinical trial)

https://pubmed.ncbi.nlm.nih.gov/39322654/

Early prediction of mortality and morbidities in VLBW preterm neonates using machine learning <a href="https://pubmed.ncbi.nlm.nih.gov/39379627/">https://pubmed.ncbi.nlm.nih.gov/39379627/</a>

Early human milk feeding: Relationship to intestinal barrier maturation and postnatal growth <a href="https://pubmed.ncbi.nlm.nih.gov/39397156/">https://pubmed.ncbi.nlm.nih.gov/39397156/</a>

Nonlinear relationship between vitamin D status on admission and bronchopulmonary dysplasia in preterm infants

https://pubmed.ncbi.nlm.nih.gov/39379632/

Hemoglobin-oxygen affinity changes in neonatal blood transfusions: RBC selection insights <a href="https://pubmed.ncbi.nlm.nih.gov/39443696/">https://pubmed.ncbi.nlm.nih.gov/39443696/</a>

Metabolomic profiling of human feces and plasma from extrauterine growth restriction infants <a href="https://pubmed.ncbi.nlm.nih.gov/39496876/">https://pubmed.ncbi.nlm.nih.gov/39496876/</a>

Identification and functional validation of variants in the promoter region of HAND1 gene in sporadic tetralogy of Fallot

https://pubmed.ncbi.nlm.nih.gov/39537763/

Gut microbiome and inflammation in response to increasing intermittent hypoxia in the neonatal rat

https://pubmed.ncbi.nlm.nih.gov/39300277/

Three-dimensional characteristics of the alveolar capillary network in infant and adult human lungs <a href="https://pubmed.ncbi.nlm.nih.gov/39313553/">https://pubmed.ncbi.nlm.nih.gov/39313553/</a>

#### Archives of Disease in Childhood - Fetal & Neonatal Edition

Macronutrient concentrations in human milk beyond the first half year of lactation: a cohort study <a href="https://pubmed.ncbi.nlm.nih.gov/39532521">https://pubmed.ncbi.nlm.nih.gov/39532521</a>

Cerebral injury and retinopathy as risk factors for blindness in extremely preterm infants <a href="https://pubmed.ncbi.nlm.nih.gov/39332892">https://pubmed.ncbi.nlm.nih.gov/39332892</a>

Neonatal hyperinsulinism: a retrospective study of presentation and management in a tertiary neonatal intensive care unit in the UK

https://pubmed.ncbi.nlm.nih.gov/39304222

Trends in sex differences in neurodevelopmental outcomes among extremely preterm infants <a href="https://pubmed.ncbi.nlm.nih.gov/39288987">https://pubmed.ncbi.nlm.nih.gov/39288987</a>

Validation of a machine learning algorithm for identifying infants at risk of hypoxic ischaemic encephalopathy in a large unseen data set

https://pubmed.ncbi.nlm.nih.gov/39251344

Fetal haemoglobin and oxygen requirement in preterm infants: an observational study

https://pubmed.ncbi.nlm.nih.gov/39322316

Association between early pulmonary arterial pressure measurements and bronchopulmonary dysplasia or mortality in very preterm infants: a prospective cohort study

https://pubmed.ncbi.nlm.nih.gov/39389763

Intermittent sigh breaths during high-frequency oscillatory ventilation in preterm infants: a randomised crossover study

https://pubmed.ncbi.nlm.nih.gov/39406472

Clinical and neuroimaging patterns of perinatal intracranial haemorrhage in fetuses and term-born neonates: a prospective observational cohort study

https://pubmed.ncbi.nlm.nih.gov/39477526

Effect of an oral stimulation protocol on breastfeeding among preterm infants: a randomised controlled trial

https://pubmed.ncbi.nlm.nih.gov/39547709

Delivery room dextrose gel for preterm hypoglycaemia (the GEHPPI study): a randomised placebocontrolled trial

https://pubmed.ncbi.nlm.nih.gov/39547709

Impact of visual distraction on neonatal mask ventilation: a simulation-based eye-tracking study <a href="https://pubmed.ncbi.nlm.nih.gov/39578042">https://pubmed.ncbi.nlm.nih.gov/39578042</a>

### **Journal of Perinatology**

Impact of teleneonatology on time to goal temperature in outborn neonates with hypoxic-ischemic encephalopathy requiring therapeutic hypothermia

https://pubmed.ncbi.nlm.nih.gov/40442292

Comparison of first trimester preeclampsia combined screening performances with various approaches in the Indonesian population

https://pubmed.ncbi.nlm.nih.gov/40394239

Family integrated care reduces stress in transferred parents of preterm infants, but not across all families: a stepped-wedge cluster-randomized trial

https://pubmed.ncbi.nlm.nih.gov/40394238

A survey of parental experiences while viewing MRI images at a fetal care center

https://pubmed.ncbi.nlm.nih.gov/40382486

Reference ranges of left ventricular diastolic multimodal ultrasound parameters in stable preterm infants in the early and late neonatal intensive care admission period

https://pubmed.ncbi.nlm.nih.gov/40379903

Time to positive blood cultures in neonatal sepsis evaluations

https://pubmed.ncbi.nlm.nih.gov/40382485

Beyond the womb: prenatal MRI's prognostic abilities for morbidity and mortality in neonates with omphaloceles

https://pubmed.ncbi.nlm.nih.gov/40379902

Pilot clinical trial on supportive rehabilitation care in neonatal intensive unit. Influence of ambient noise on premature infants

https://pubmed.ncbi.nlm.nih.gov/40369293

Implementation of perinatal mental health screening for parents of infants in a level IV neonatal intensive care unit: A quality improvement initiative

https://pubmed.ncbi.nlm.nih.gov/40335721

Pulmonary vasodilator use in very preterm infants in United States children's hospitals <a href="https://pubmed.ncbi.nlm.nih.gov/40316754">https://pubmed.ncbi.nlm.nih.gov/40316754</a>

### **Neonatology**

No new articles

## **American Journal of Perinatology**

Design of a phase 3, global, multicenter, randomized, placebo-controlled, double-blind study of nipocalimab in pregnancies at risk for severe hemolytic disease of the fetus and newborn <a href="https://pubmed.ncbi.nlm.nih.gov/39197469/">https://pubmed.ncbi.nlm.nih.gov/39197469/</a>

Trends in the mortality and death of periviable preterm infants in the United States, 2011 to 2020 <a href="https://pubmed.ncbi.nlm.nih.gov/39532113/">https://pubmed.ncbi.nlm.nih.gov/39532113/</a>

Tachycardia–desaturation episodes in neonatal intensive care unit patients with and without bronchopulmonary dysplasia

https://pubmed.ncbi.nlm.nih.gov/39384297/

Illicit fentanyl in the prenatal period: a significant emerging risk for neonatal opioid withdrawal syndrome

https://pubmed.ncbi.nlm.nih.gov/39471848/

Neurodevelopmental outcomes in neonates surviving fetomaternal hemorrhage compared with a matched unexposed group in a large integrated health care system

https://pubmed.ncbi.nlm.nih.gov/39532114/

Impact of pharmacologic patent ductus arteriosus treatment on acute respiratory and oxygenation metrics in very low birth weight infants

https://pubmed.ncbi.nlm.nih.gov/39406374/

Identifying hemolytic disease of the fetus and newborn within a large integrated health care system identifying hemolytic disease of the fetus and newborn within a large integrated health care system <a href="https://pubmed.ncbi.nlm.nih.gov/39532115/">https://pubmed.ncbi.nlm.nih.gov/39532115/</a>

Cardiorespiratory stability in critically ill preterm infants following dexmedetomidine initiation <a href="https://pubmed.ncbi.nlm.nih.gov/39424361/">https://pubmed.ncbi.nlm.nih.gov/39424361/</a>

Plain language summary of publication: design of the phase 3 azalea trial of nipocalimab in severe hemolytic disease of the fetus and newborn

https://pubmed.ncbi.nlm.nih.gov/40049596/

### Journal of Neonatal-Perinatal Medicine

A neonate with upper cervical spinal cord injury as a previously unrecognized complication of vacuum-assisted delivery and uterine fundal pressure

https://pubmed.ncbi.nlm.nih.gov/40314965

Neonatal level of care and length of stay of moderate and late preterm infants

https://pubmed.ncbi.nlm.nih.gov/40323111

To retrospectively study the use of antibiotics among neonates with a gestational age of  $\geq$  35 weeks experiencing respiratory distress, and to identify the risk factors associated with antibiotic use <a href="https://pubmed.ncbi.nlm.nih.gov/40329588">https://pubmed.ncbi.nlm.nih.gov/40329588</a>

Combination therapy for patent ductus arteriosus in preterm infants: Narrative review

https://pubmed.ncbi.nlm.nih.gov/40336207

Applications of lung ultrasound as an emerging tool in neonates

https://pubmed.ncbi.nlm.nih.gov/40340483

Trends and racial differences in hypoxic ischemic encephalopathy-related mortality in newborns in the United States, 2007-2022

https://pubmed.ncbi.nlm.nih.gov/40340484

Malposition of a nasogastric tube into the middle ear of a premature one week old infant <a href="https://pubmed.ncbi.nlm.nih.gov/40340485">https://pubmed.ncbi.nlm.nih.gov/40340485</a>

A rare yet preventable complication of lower extremity PICC malposition in an extreme preterm: Implications for enhanced procedural imaging standards

https://pubmed.ncbi.nlm.nih.gov/40340486

Comparative study between nebulized and intravenous magnesium sulfate for treatment of persistent pulmonary hypertension in neonates

https://pubmed.ncbi.nlm.nih.gov/40340487

Determinants of neonatal near miss among neonates admitted at Bahir Dar public hospitals, North West Ethiopia: A case-control study

https://pubmed.ncbi.nlm.nih.gov/40340488

Story-Telling Attention-Refocusing (STAR) intervention to alleviate acute stress in parents of infants in the NICU

https://pubmed.ncbi.nlm.nih.gov/40340489

Role of sequential functional echocardiography in predicting clinically apparent patent ductus arteriosus in preterm very low birth weight newborns: An observational study <a href="https://pubmed.ncbi.nlm.nih.gov/40371823">https://pubmed.ncbi.nlm.nih.gov/40371823</a>

Comparative study of individuals born with orofacial clefts in the United States and Brazil https://pubmed.ncbi.nlm.nih.gov/40372708

The effect of newborn individualized developmental care and assessment program (NIDCAP) on pain caused by eye examination for ROP screening

https://pubmed.ncbi.nlm.nih.gov/40372813

Comparing Heated Humidified High Flow Nasal Cannula to Nasal Continuous Positive Airway Pressure as post-extubation respiratory support in preterm infants: A comprehensive systematic review and meta-analysis

https://pubmed.ncbi.nlm.nih.gov/40448293

### Maternal Health, Neonatology and Perinatology

A multisite inventory study of neonatal syringe pumps in Zambia (PDF)

https://mhnpjournal.biomedcentral.com/articles/10.1186/s40748-024-00192-6

Umbilical venous catheter misplacement due to unexpected supernumerary patent umbilical artery (PDF)

https://mhnpjournal.biomedcentral.com/articles/10.1186/s40748-025-00209-8

#### **Neoreviews**

Potential applications of umbilical cord blood-derived cells in neonatal diseases

https://pubmed.ncbi.nlm.nih.gov/40306679

Esophageal atresia and tracheoesophageal fistula: diagnosis, management, and outcomes

https://pubmed.ncbi.nlm.nih.gov/40306677

Bronchopulmonary dysplasia-associated pulmonary hypertension: screening and management

https://pubmed.ncbi.nlm.nih.gov/40306676

Genetic disorders of surfactant metabolism

https://pubmed.ncbi.nlm.nih.gov/40306683

A case of neonate with silent expression

https://pubmed.ncbi.nlm.nih.gov/40306678

A newborn presenting with alternating bradycardia and tachycardia

https://pubmed.ncbi.nlm.nih.gov/40306685

Selective fetal reduction for an anomaly in a twin gestation

https://pubmed.ncbi.nlm.nih.gov/40306682

Neonate with a scrotal swelling

https://pubmed.ncbi.nlm.nih.gov/40306681

Prenatal diagnosis of a large congenital epulis

https://pubmed.ncbi.nlm.nih.gov/40306684

Outcomes after perinatal arterial ischemic stroke

https://pubmed.ncbi.nlm.nih.gov/40306680

#### **JAMA Pediatrics**

Addressing inequities in breastfeeding and beyond

https://pubmed.ncbi.nlm.nih.gov/40029650/

Breastfeeding support provided by lactation consultants: a systematic review and meta-analysis

https://pubmed.ncbi.nlm.nih.gov/40029627/

Regional growth in us neonatal intensive care capacity and mortality, 1991-2020

https://pubmed.ncbi.nlm.nih.gov/40126466/

### **BMC Pediatrics**

Practice and factors associated with neonatal sunlight exposure among mothers in Jigjiga City, Somali Regional State, Eastern Ethiopia

https://pubmed.ncbi.nlm.nih.gov/40448108/

Breastfeeding in children with down syndrome

https://pubmed.ncbi.nlm.nih.gov/40448052/

Role of NLRC3 in modulating inflammatory responses in neonates

https://pubmed.ncbi.nlm.nih.gov/40437402/

Determinants of neonatal jaundice among neonates admitted to neonatal intensive care unit in hospitals of Gurage zone, Southern Ethiopia

https://pubmed.ncbi.nlm.nih.gov/40426092/

The term cotwin with spatial pulmonary lesions and elevated maternal-neonatal D-dimer levels following single intrauterine fetal death in a monochorionic-monoamniotic twin pregnancy: a case report and literature review

https://pubmed.ncbi.nlm.nih.gov/40426068/

Prevention of nasal injury in preterm infants during positive pressure ventilation: a systematic review of interface and dressing selection

https://pubmed.ncbi.nlm.nih.gov/40426095/

Detecting acute bilirubin encephalopathy in neonates based on multimodal MRI images and non-image clinical data

https://pubmed.ncbi.nlm.nih.gov/40414877/

Vitamin D-related risk factors for preterm and full-term infants at birth: a retrospective study <a href="https://pubmed.ncbi.nlm.nih.gov/40413415/">https://pubmed.ncbi.nlm.nih.gov/40413415/</a>

Incidence and risk factors of early-onset neonatal infections in Butembo: case of Katwa Health Zone from January 2020 to December 2022

https://pubmed.ncbi.nlm.nih.gov/40413432/

Clinical insights from a rare case of neonatal upper gastrointestinal obstruction complicated by H-Type tracheoesophageal fistula: case report and review of the literature

https://pubmed.ncbi.nlm.nih.gov/40405124/

How to personalise ventilation of infants with congenital diaphragmatic hernia? A simulation study <a href="https://pubmed.ncbi.nlm.nih.gov/40399837/">https://pubmed.ncbi.nlm.nih.gov/40399837/</a>

Protective effects of Bronchopulmonary Sequestration (BPS) on the prognosis of neonates with Congenital Diaphragmatic Hernia (CDH)

https://pubmed.ncbi.nlm.nih.gov/40394547/

Prevalence and factors associated with neonatal mortality at the neonatal intensive care unit at St. Mary's Hospital Lacor, Northern Uganda

https://pubmed.ncbi.nlm.nih.gov/40389907/

Methodological procedures for ultrasonographic assessment of the tongue during sucking in full-term infants: A scoping review

https://pubmed.ncbi.nlm.nih.gov/40389930/

The effect of implementing parenteral nutrition guideline on growth and clinical outcomes in preterm infants: a comparative study

https://pubmed.ncbi.nlm.nih.gov/40383757/

#### **Pediatric Critical Care Medicine**

Extubation failure in neonates following congenital cardiac surgery: multicenter retrospective cohort, 2017–2020

https://pubmed.ncbi.nlm.nih.gov/39927824/

Risk Analytics and the Art of Ventilator Liberation Following Neonatal Cardiac Surgery <a href="https://pubmed.ncbi.nlm.nih.gov/40062819/">https://pubmed.ncbi.nlm.nih.gov/40062819/</a>

# **New England Journal of Medicine**

No relevant articles

#### Lancet

No relevant articles

#### **JAMA**

No relevant articles

### **BMJ**

No relevant articles

#### **Pediatric Infectious Disease Journal**

Effectiveness of nirsevimab immunoprophylaxis against respiratory syncytial virus-related outcomes in hospital care settings: a seasonal cohort study of infants in Catalonia, Spain <a href="https://pubmed.ncbi.nlm.nih.gov/39823640/">https://pubmed.ncbi.nlm.nih.gov/39823640/</a>

Risk factors for infections caused by extended-spectrum beta-lactamase producing and carbapenem-resistant enterobacterales in pediatric critical care settings: a case-control study <a href="https://pubmed.ncbi.nlm.nih.gov/40215199/">https://pubmed.ncbi.nlm.nih.gov/40215199/</a>

Growth and survival of a cohort of congenital zika virus syndrome children born with microcephaly and children who developed with microcephaly after birth

https://pubmed.ncbi.nlm.nih.gov/39853283/

#### **Pediatric Cardiology**

No new articles

# **Pediatric Neurology**

Consensus approach for standardization of the timing of brain magnetic resonance imaging and classification of brain injury in neonates with neonatal encephalopathy/hypoxic-ischemic encephalopathy: a Canadian perspective

https://pubmed.ncbi.nlm.nih.gov/40048833/

Efficacy and safety of tacrolimus therapy in patients with juvenile myasthenia gravis: a single-arm meta-analysis

https://pubmed.ncbi.nlm.nih.gov/40081091/

Comparison of intrauterine and postnatal brain magnetic resonance imaging: systematic review

https://pubmed.ncbi.nlm.nih.gov/40101304/

Seizures may worsen outcomes of neonatal hypoxic-ischemic encephalopathy: a longitudinal serum biomarkers study

https://pubmed.ncbi.nlm.nih.gov/40101305/

Electroencephalography in preterm infants for predicting neurodevelopmental outcomes: a systematic review and diagnostic test accuracy meta-analysis

https://pubmed.ncbi.nlm.nih.gov/40106877/

# **Obstetrics and Gynecology**

Tailored prenatal care delivery for pregnant individuals: ACOG clinical consensus no. 8 <a href="https://pubmed.ncbi.nlm.nih.gov/40245426/">https://pubmed.ncbi.nlm.nih.gov/40245426/</a>

### **American Journal of Obstetrics & Gynecology**

Cancer diagnosis during pregnancy is associated with severe maternal and neonatal morbidity <a href="https://pubmed.ncbi.nlm.nih.gov/39447820/">https://pubmed.ncbi.nlm.nih.gov/39447820/</a>

Association of maternal mild hypothyroidism in the first and third trimesters with obstetric and perinatal outcomes: a prospective cohort study

https://pubmed.ncbi.nlm.nih.gov/39218287/

Genetic disorders and their association with morbidity and mortality in early preterm small for gestational age infants

https://pubmed.ncbi.nlm.nih.gov/39322018/

Comparative effectiveness of treating prenatal depression with counseling versus antidepressants in relation to preterm delivery

https://pubmed.ncbi.nlm.nih.gov/39218285/

Accurate prediction of growth-restricted neonates at term using machine learning <a href="https://pubmed.ncbi.nlm.nih.gov/39864484/">https://pubmed.ncbi.nlm.nih.gov/39864484/</a>

### **Hospital Pediatrics**

Loss and grief in parents of children hospitalized for congenital heart disease available to purchase <a href="https://pubmed.ncbi.nlm.nih.gov/40169154/">https://pubmed.ncbi.nlm.nih.gov/40169154/</a>

### **BASIC SCIENCE SELECTIONS**

Nesfatin-1 Suppresses inflammation in bronchopulmonary dysplasia by regulating HMGB-1/TLR4/p65/NLRP3 Signaling Pathway

https://www.ncbi.nlm.nih.gov/pubmed/40415368

Club cell secretory protein (CC16) polymorphisms in preterm neonates with respiratory distress syndrome and bronchopulmonary dysplasia

https://www.ncbi.nlm.nih.gov/pubmed/40374938

Hedgehog-interacting protein orchestrates alveologenesis and protects against bronchopulmonary dysplasia and emphysema

https://www.ncbi.nlm.nih.gov/pubmed/40333979

Necrotizing enterocolitis: specific human milk oligosaccharides prevent enteric glia loss and hypomotility

https://www.ncbi.nlm.nih.gov/pubmed/40348872

Human milk peptide MAMP-1 alleviates necrotizing enterocolitis via inhibition of the TLR4-mediated PI3K-AKT-NF-kappaB signaling pathway

https://www.ncbi.nlm.nih.gov/pubmed/39918424

The anti-inflammatory peptide RLS-0071 reduces immune cell recruitment and oxidative damage in a neonatal rat model of hypoxic ischemic encephalopathy (HIE)

https://www.ncbi.nlm.nih.gov/pubmed/40368421

Metabolic correlations between kidney and eye in a mouse model of oxygen-induced retinopathy and retinopathy of prematurity

https://www.ncbi.nlm.nih.gov/pubmed/40312111

### **Clinical**

Current and emerging therapies for prevention and treatment of bronchopulmonary dysplasia in preterm infants

https://www.ncbi.nlm.nih.gov/pubmed/40374983

Proteomic analysis of nasopharyngeal aspirate biomarkers for prematurity-related bronchopulmonary dysplasia

https://www.ncbi.nlm.nih.gov/pubmed/40368027

Postnatal dexamethasone treatment for preterm infants at high risk for bronchopulmonary dysplasia is associated with improved regional brain volumes: a prospective cohort study <a href="https://www.ncbi.nlm.nih.gov/pubmed/40360237">https://www.ncbi.nlm.nih.gov/pubmed/40360237</a>

Ischemic placental disease as a risk factor for bronchopulmonary dysplasia in extremely preterm infants

https://www.ncbi.nlm.nih.gov/pubmed/40355123

Pain management in preterm infants with necrotizing enterocolitis: an international expert consensus statement

https://www.ncbi.nlm.nih.gov/pubmed/40369136

End-tidal carbon dioxide monitoring in neonates receiving therapeutic hypothermia for hypoxic-ischemic encephalopathy

https://www.ncbi.nlm.nih.gov/pubmed/40415453

Evaluation of cardiac functions in neonates with hypoxic ischemic encephalopathy <a href="https://www.ncbi.nlm.nih.gov/pubmed/40256799">https://www.ncbi.nlm.nih.gov/pubmed/40256799</a>

Risk factors for retinopathy of prematurity among preterm infants with bronchopulmonary dysplasia

https://www.ncbi.nlm.nih.gov/pubmed/40360447