

Publications Working Group

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Section on Neonatal-Perinatal Medicine

ARTICLES OF INTEREST – July, 2023

[Palivizumab prophylaxis in infants and young children at increased risk of hospitalization for respiratory syncytial virus infection](#)

Mary T Caserta, Sean T O'Leary, Flor M Munoz, et al. *Pediatrics*.

This technical report summarizes the literature review by the Committee on Infectious Diseases, supporting the reaffirmation of the 2014 AAP policy statement on palivizumab prophylaxis among infants and young children at increased risk of hospitalization for RSV infection. Since the last update in 2014, which refined prophylaxis guidance to focus on those children at greatest risk, data have become available regarding the seasonality of RSV circulation, the incidence and risk factors associated with bronchiolitis hospitalizations, and the potential effects of the implementation of prophylaxis recommendations on hospitalization rates of children with RSV infection. Review of publications since 2014 did not support a change in recommendations for palivizumab prophylaxis and continues to endorse the guidance provided in the 2021 Red Book.

[Viral infections and neonatal necrotizing enterocolitis: a meta-analysis](#)

Srinivasan Mani, Snehashis Hazra, Joseph Hagan, et al. *Pediatrics*.

This meta-analysis included observational studies that examined the association between viral infections and NEC in newborn infants. A significant association was noted between viral infections and NEC (odds ratio [OR], 3.81, 95% confidence interval: 1.99-7.30, 24 studies). In subgroup analysis based on specific viruses, infection with rotavirus (OR, 3.96 [1.12-13.95], 10 studies), cytomegalovirus (OR, 3.50 [1.60-7.65], 5 studies), norovirus (OR, 11.95 [2.05-69.84], 2 studies), and astrovirus (OR, 6.32 [2.49-16.02], 2 studies) was significantly associated with NEC.

[Construction of a synthetic colostrum substitute and its protection of intestinal cells against inflammation in an in vitro model of necrotizing enterocolitis](#)

Syaza Y Binte Abu Bakar, Malinda Salim, Andrew J Clulow, et al. *ACS Appl Mater Interfaces*.

Colostrum provides bioactive components that are essential for the colonization of microbiota in the infant gut, while preventing infectious diseases such as necrotizing enterocolitis. This study is aimed at the rational design of an appropriate lipid component for a colostrum substitute and determining the ability of this formulation to reduce inflammation in intestinal cells. Gas chromatography was utilized to map lipid composition. The self-assembly of lipid components occurring during digestion of colostrum was monitored using small-angle X-ray scattering for comparison with substitute mixtures containing pure triglyceride lipids based on their abundance in colostrum. Subtle differences in lipid self-assembly were evident, with the substitute mixtures exhibiting additional non-lamellar phases, which were not seen for human colostrum. The biological markers of necrotizing enterocolitis were modulated in cells that were treated with bifidobacteria cultured on colostrum substitute mixtures, compared to those

treated with infant formula. These findings provide an insight into a colostrum substitute mixture that resembles human colostrum in terms of composition and structural behavior during digestion and potentially reduces some of the characteristics associated with necrotizing enterocolitis.

[Thresholds for surfactant use in preterm neonates: a network meta-analysis](#)

Aoife Branagan, Ivan Yu, Kurinchi Gurusamy, et al. *Arch Dis Child Fetal Neonatal Ed.*

This is a network meta-analysis of randomized controlled trials of different surfactant treatment strategies for respiratory distress syndrome (RDS) to assess if a certain fraction of inspired oxygen (FiO₂) is optimal for selective surfactant therapy. The primary outcome was neonatal mortality, compared between groups treated with selective surfactant therapy at different thresholds of FiO₂. Secondary outcomes included respiratory morbidity and major complications of prematurity. There was no statistically significant differences between 30%, 40% and 50% FiO₂ thresholds. A sensitivity analysis of infants treated in the era of high antenatal steroid use and nasal continuous positive airway pressure as initial mode of respiratory support showed no difference in mortality, RDS or intraventricular haemorrhage alone but suggested an increase in the combined outcome of major morbidities in the 60% threshold. These results do not show a clear benefit of surfactant treatment at any threshold of FiO₂. The 60% threshold was suggestive of increased morbidity. There was no advantage seen with prophylactic treatment.

[Bronchopulmonary dysplasia prediction models: a systematic review and meta-analysis with Validation](#)

T'ng Chang Kwok, Natalie Batey, Ka Ling Luu, et al. *Pediatr Res.*

This systematic review identified 64 studies that developed and/or validated 53 BPD prediction models with meta-analysis carried out on 22 models. The authors identified published prediction models and conducted external validation on a population-based retrospective cohort study from the UK National Neonatal Research Database (NNRD). Only 6 out of the 53 identified prediction models could be validated with this cohort with C-statistics between 0.70 and 0.90 but with poor calibration. Laughon 2011 showed the best performance in predicting the BPD/death composite outcome using predictors at day 1 of age with a C-statistic of 0.76 (95% CI 0.70–0.81) and O:E ratio of 0.96 (95% CI 0.85–0.99).

[Potential for maternally administered vaccine for infant group b streptococcus](#)

Shabir A Madhi, Annaliesa S Anderson, Judith Absalon, et al. *N Engl J Med.*

Newborns with anti-capsular polysaccharide (CPS) IgG have a reduced risk of GBS disease. A hexavalent CPS maternal vaccine (GBS6) is being developed and currently in an ongoing phase 2, placebo-controlled trial. This involves administration of vaccine to pregnant women to prevent invasive GBS in infants. Analysis of maternal transfer of antibodies and anti-CPS IgG concentrations in association with a reduced risk of invasive disease among newborns through 89 days of age. The results showed 57 to 97% of the infants having a seroresponse to the most immunogenic formulation which is associated with a reduced risk of invasive GBS.

[Systematic review and meta-analysis of neonatal outcomes of COVID-19 vaccination in Pregnancy](#)

Dingning Zhang, Tingting Huang, Zhihui Chen, et al. *Pediatr Res.*

This study addressed the safety of COVID-19 vaccine in relation to neonatal outcomes after maternal vaccination of COVID-19 during pregnancy. The analysis included a total of 15 studies. The results showed protective effects on some outcomes such as reduction rates of preterm birth, SGA, and APGAR score ≤ 7 at 5 minutes of life. The vaccination in pregnant women does not raise significant adverse effects on neonatal such as NICU admission and congenital

anomalies.

[Early predictors of neurodevelopment after perinatal arterial ischemic stroke: a systematic review and meta-analysis](#)

Lisanne M Baak, Niek E van der Aa, Annemijn A E Verhagen, et al. *Pediatr Res*.

This study is a systematic review of early predictors for various long-term outcome categories after perinatal arterial ischemic stroke (PAIS), including a meta-analysis for the outcome unilateral spastic cerebral palsy. Corticospinal tract assessment on MRI and standardized motor assessments were found to be best to predict cerebral palsy after PAIS, while bedside techniques such as (a)EEG and NIRS was shown to improve cognitive outcome prediction. They determined that future research should be focused on improving outcome prediction for non-motor outcomes.

[Safety of high dose erythropoietin used with therapeutic hypothermia as treatment for newborn hypoxic-ischemic encephalopathy: secondary analysis of the heal randomized controlled trial](#)

Sandra E Juul, Bryan A Comstock, Marie-Coralie Cornet, et al. *J Pediatr*.

Five hundred infants born at ≥ 36 weeks of gestation with moderate or severe hypoxic ischemic encephalopathy undergoing therapeutic hypothermia were randomized to Epo or placebo on days 1, 2, 3, 4, and 7. Pretreatment and posttreatment SAEs (serious adverse events) were compared with adjusted generalized linear models, with posttreatment models adjusted for the presence of a pretreatment SAE. A small increased risk of major thrombotic events was identified in the Epo treatment group.

[Additional value of 3-month cranial magnetic resonance imaging in infants with neonatal encephalopathy following perinatal asphyxia](#)

Corline E J Parmentier, Maarten H Lequin, Thomas Alderliesten, et al. *J Pediatr*.

This was a retrospective, single-center study including 63 infants with perinatal asphyxia and NE (neonatal encephalopathy) (n = 28 cooled) with cranial MRI <2 weeks and 2-4 months after birth. Both scans were assessed using biometrics, a validated injury score for neonatal MRI, and a new score for 3-month MRI, with a white matter (WM), deep gray matter (DGM), and cerebellum subscore. The evolution of brain lesions was assessed, and both scans were related to 18- to 24-month composite outcome. Adverse outcome included cerebral palsy, neurodevelopmental delay, hearing/visual impairment, and epilepsy. In particular, DGM abnormalities on 3-month MRI, preceded by DGM abnormalities on the neonatal MRI, were associated with 18- to 24-month outcome, indicating the utility of 3-month MRI for treatment evaluation in neuroprotective trials. However, the clinical usefulness of 3-month MRI seems limited compared with neonatal MRI.

OTHER NOTEWORTHY PUBLICATIONS – July, 2023

COVID-19

Confirmed SARS-CoV-2 infection in Scottish neonates 2020-2022: a national, population-based cohort study

<https://www.ncbi.nlm.nih.gov/pubmed/36609412>

Systematic review and meta-analysis of neonatal outcomes of COVID-19 vaccination in pregnancy

<https://pubmed.ncbi.nlm.nih.gov/36596943/>

Pediatrics

Safety and tolerability of V114 pneumococcal vaccine in infants: a phase 3 study

<https://pubmed.ncbi.nlm.nih.gov/37309607>

Palivizumab prophylaxis in infants and young children at increased risk of hospitalization for respiratory syncytial virus infection

<https://pubmed.ncbi.nlm.nih.gov/37357729>

Primary care framework to monitor preterm infants for neurodevelopmental outcomes in early childhood

<https://pubmed.ncbi.nlm.nih.gov/37357736>

Viral infections and neonatal necrotizing enterocolitis: a meta-analysis

<https://pubmed.ncbi.nlm.nih.gov/37293714>

Care coordination programs for infants with complex conditions: a systematic review

<https://pubmed.ncbi.nlm.nih.gov/37288503>

A neonate with a rash

<https://pubmed.ncbi.nlm.nih.gov/37340913>

Atypical systemic neonatal herpes diagnosed incidentally in twin infants

<https://pubmed.ncbi.nlm.nih.gov/37278207>

Journal of Pediatrics

Glucose and brain injury in neonatal encephalopathy (NE) – the chicken or the egg?

<https://doi.org/10.1016/j.jpeds.2023.113553>

Neurodevelopmental consequences of neonatal thrombocytopenia

<https://doi.org/10.1016/j.jpeds.2023.113555>

Understanding the clinical utility of genome sequencing in critically ill newborns

<https://pubmed.ncbi.nlm.nih.gov/37088180/>

Screening for biliary atresia: large-scale implementation moving forward

<https://pubmed.ncbi.nlm.nih.gov/37028751/>

Negative studies and the future of prenatal counseling at the margin of gestational viability

<https://pubmed.ncbi.nlm.nih.gov/37088184/>

Accurate prediction of bronchopulmonary dysplasia: are we there yet?

<https://pubmed.ncbi.nlm.nih.gov/36933768/>

Pulmonary hypertension in infants and children with vein of galen malformation and association with clinical outcomes

<https://pubmed.ncbi.nlm.nih.gov/37023946/>

Increasing the percentage of neonates consuming human milk in a pediatric cardiothoracic intensive care unit: a quality improvement initiative

<https://pubmed.ncbi.nlm.nih.gov/37088183/>

Preterm birth and total health care use and costs in the first 5 years of life: a population-based study

<https://pubmed.ncbi.nlm.nih.gov/36657660/>

Prediction models for bronchopulmonary dysplasia in preterm infants: a systematic review and meta-analysis

<https://pubmed.ncbi.nlm.nih.gov/37059387/>

Children newly diagnosed with fetal and neonatal alloimmune thrombocytopenia: neurodevelopmental outcome at school age

<https://pubmed.ncbi.nlm.nih.gov/36933767/>

Safety of high dose erythropoietin used with therapeutic hypothermia as treatment for newborn hypoxic-ischemic encephalopathy: secondary analysis of the heal randomized controlled trial

<https://pubmed.ncbi.nlm.nih.gov/37019334/>

Preterm neurodevelopmental trajectories from 18 months to 4.5 years

<https://pubmed.ncbi.nlm.nih.gov/37019331/>

Additional value of 3-month cranial magnetic resonance imaging in infants with neonatal encephalopathy following perinatal asphyxia

<https://pubmed.ncbi.nlm.nih.gov/37019329/>

Delayed-onset transient hyperinsulinism in infants with very low and extremely low birth weights: a cohort study

<https://pubmed.ncbi.nlm.nih.gov/37019330/>

Penile pearls in a newborn

<https://pubmed.ncbi.nlm.nih.gov/36708873/>

Brachial plexus palsy and ptosis in a newborn

<https://pubmed.ncbi.nlm.nih.gov/37004957/>

Pediatric Research

Early predictors of neurodevelopment after perinatal arterial ischemic stroke: a systematic review and meta-analysis

<https://pubmed.ncbi.nlm.nih.gov/36575364/>

Bronchopulmonary dysplasia prediction models: a systematic review and meta-analysis with validation

<https://pubmed.ncbi.nlm.nih.gov/36624282/>

Neuromonitoring in neonatal critical care part II: extremely premature infants and critically ill neonates

<https://pubmed.ncbi.nlm.nih.gov/36434203/>

Neuromonitoring in neonatal critical care part I: neonatal encephalopathy and neonates with possible seizures

<https://pubmed.ncbi.nlm.nih.gov/36476747/>

Prematurity-associated wheeze: current knowledge and opportunities for further investigation

<https://pubmed.ncbi.nlm.nih.gov/36463364/>

Critical functional lung volumes in neonatal intensive care: evidence and clinical applications

<https://pubmed.ncbi.nlm.nih.gov/36624281/>

The publication quality of laboratory values in clinical studies in neonates

<https://pubmed.ncbi.nlm.nih.gov/36550353/>

Hippocampal volume and cognitive performance in children with congenital heart disease

<https://pubmed.ncbi.nlm.nih.gov/36611074/>

Different probiotic strains alter human cord blood monocyte responses

<https://pubmed.ncbi.nlm.nih.gov/36476746/>

Red cell infusion but not saline is effective for volume expansion in preterm piglets

<https://pubmed.ncbi.nlm.nih.gov/36509847/>

CCL3 aggravates intestinal damage in NEC by promoting macrophage chemotaxis and M1 macrophage polarization

<https://pubmed.ncbi.nlm.nih.gov/36550354/>

Hemodynamic impacts of apelin-13 in a neonatal lamb model of septic peritonitis

<https://pubmed.ncbi.nlm.nih.gov/36460738/>

Associations of maternal plasma and umbilical cord plasma metabolomics profiles with birth anthropometric measures

<https://pubmed.ncbi.nlm.nih.gov/36627359/>

Prematurity blunts protein synthesis in skeletal muscle independently of body weight in neonatal pigs

<https://pubmed.ncbi.nlm.nih.gov/36627358/>

Child and family factors associated with positive outcomes among youth born extremely preterm

<https://pubmed.ncbi.nlm.nih.gov/36639518/>

Bedside tracking of functional autonomic age in preterm infants

<https://pubmed.ncbi.nlm.nih.gov/36376508/>

Left ventricular function before and after percutaneous patent ductus arteriosus closure in preterm infants

<https://pubmed.ncbi.nlm.nih.gov/36380071/>

Consequences of gestational diabetes mellitus on neonatal cardiovascular health: MySweetHeart Cohort study

<https://pubmed.ncbi.nlm.nih.gov/36443400/>

Quantification of cephalocaudal progression of jaundice in preterm infants

<https://pubmed.ncbi.nlm.nih.gov/36443401/>

Risk of seizures in neonates with hypoxic-ischemic encephalopathy receiving hypothermia plus erythropoietin or placebo

<https://pubmed.ncbi.nlm.nih.gov/36470964/>

The role of vitamin D receptor gene polymorphism in the development of necrotizing enterocolitis

<https://pubmed.ncbi.nlm.nih.gov/36596941/>

Ultrasonographic evaluation of the early brain growth pattern in very low birth weight infants

<https://pubmed.ncbi.nlm.nih.gov/36624287/>

Right to left ventricular volume ratio is associated with mortality in congenital diaphragmatic hernia

<https://pubmed.ncbi.nlm.nih.gov/36624284/>

Variations in care of neonates during therapeutic hypothermia: call for care practice bundle implementation

<https://pubmed.ncbi.nlm.nih.gov/36624286/>

Longitudinal perturbations of plasma nuclear magnetic resonance profiles in neonatal encephalopathy

<https://pubmed.ncbi.nlm.nih.gov/36639516/>

Postnatal growth of small for gestational age late preterm infants: determinants of catch-up growth

<https://pubmed.ncbi.nlm.nih.gov/36460739/>

Structural racism is associated with adverse postnatal outcomes among Black preterm infants

<https://pubmed.ncbi.nlm.nih.gov/36577795/>

Archives of Disease in Childhood - Fetal & Neonatal Edition

Getting to health equity in NICU care in the USA and beyond

<https://www.ncbi.nlm.nih.gov/pubmed/36379698>

Thresholds for surfactant use in preterm neonates: a network meta-analysis

<https://www.ncbi.nlm.nih.gov/pubmed/36600484>

National PRECePT Programme: a before-and-after evaluation of the implementation of a national quality improvement programme to increase the uptake of magnesium sulfate in preterm deliveries

<https://www.ncbi.nlm.nih.gov/pubmed/36617442>

Emotional journey of Asian mothers of premature infants who received pasteurised donor human milk: a qualitative study

<https://www.ncbi.nlm.nih.gov/pubmed/36564162>

Birth order and morbidity and mortality to hospital discharge among inborn very low-birthweight, very preterm twin infants admitted to neonatal intensive care: a retrospective cohort study

<https://www.ncbi.nlm.nih.gov/pubmed/36585246>

Survey of transfusion practices in preterm infants in Europe

<https://www.ncbi.nlm.nih.gov/pubmed/36653173>

Effect of systemic hydrocortisone in ventilated preterm infants on parent-reported behavioural outcomes at 2 years corrected age: follow-up of a randomised clinical trial

<https://www.ncbi.nlm.nih.gov/pubmed/36593110>

Low dose or very low dose phenylephrine and cyclopentolate microdrops for retinopathy of prematurity eye examinations (The Little Eye Drop Study): a randomised controlled non-inferiority trial

<https://www.ncbi.nlm.nih.gov/pubmed/36593111>

Association of nurse staffing and unit occupancy with mortality and morbidity among very preterm infants: a multicentre study

<https://www.ncbi.nlm.nih.gov/pubmed/36609411>

Comparison of two automated oxygen controllers in oxygen targeting in preterm infants during admission: an observational study

<https://www.ncbi.nlm.nih.gov/pubmed/36599676>

Variation in hospital morbidities in an Australian neonatal intensive care unit network

<https://www.ncbi.nlm.nih.gov/pubmed/36593112>

Supporting all breaths versus supporting some breaths during synchronised mechanical ventilation in neonates: a systematic review and meta-analysis

<https://www.ncbi.nlm.nih.gov/pubmed/36631252>

Parents' Experiences of Communication in Neonatal Care (PEC): a neonatal survey refined for real-time parent feedback

<https://www.ncbi.nlm.nih.gov/pubmed/36717224>

Antiseizure medication at discharge in infants with hypoxic-ischaemic encephalopathy: an observational study

<https://www.ncbi.nlm.nih.gov/pubmed/36732048>

Journal of Perinatology

NICU sensory experiences associated with positive outcomes: an integrative review of evidence from 2015-2020

<https://www.ncbi.nlm.nih.gov/pubmed/37029165>

Early post-operative neurodevelopment and visual assessment in neonates with congenital heart disease undergoing cardiac surgery

<https://pubmed.ncbi.nlm.nih.gov/36347968/>

Early surgery in very preterm infants is associated with brain abnormalities on term MRI: a propensity score analysis

<https://www.ncbi.nlm.nih.gov/pubmed/36966211>

Outcomes of congenital diaphragmatic hernia among preterm infants: inverse probability of treatment weighting analysis

<https://www.ncbi.nlm.nih.gov/pubmed/37055479>

Fetal outcomes and continuity in perinatal palliative care patients at a quaternary care pediatric hospital

<https://www.ncbi.nlm.nih.gov/pubmed/37005452>

Antenatal consultation and deliberation: adapting to parental preferences

<https://www.ncbi.nlm.nih.gov/pubmed/36725985>

Transmission of negative biases through social commentary included in neonatal intensive care unit progress notes

<https://www.ncbi.nlm.nih.gov/pubmed/36841888>

Characteristics and outcomes of neonatal opioid withdrawal syndrome in preterm infants: a retrospective cohort study in the current era

<https://www.ncbi.nlm.nih.gov/pubmed/37188773>

Assessing the Eat, Sleep, Console model for neonatal abstinence syndrome management at a regional referral center

<https://www.ncbi.nlm.nih.gov/pubmed/37185367>

Drivers of decision-making regarding infant sleep practices among mothers with opioid use disorder

<https://www.ncbi.nlm.nih.gov/pubmed/37270538>

The Neonatal Withdrawal Assessment Tool (NWAT): pilot inter-rater reliability and content validity

<https://www.ncbi.nlm.nih.gov/pubmed/36914798>

Workload In Neonatology (WORKLINE): Validation and feasibility of a system for measuring clinician workload integrated into the electronic health record

<https://www.ncbi.nlm.nih.gov/pubmed/37131049>

Optimizing the hospital discharge process to facilitate family-centered care for well newborns

<https://www.ncbi.nlm.nih.gov/pubmed/37328524>

Preterm congenital heart disease and neurodevelopment: the importance of looking beyond the initial hospitalization

<https://www.ncbi.nlm.nih.gov/pubmed/37179381>

Role of genomic medicine and implementing equitable access for critically ill infants in neonatal intensive care units

<https://www.ncbi.nlm.nih.gov/pubmed/36774516>

The patient/physician relationship in a post-Roe world: a neonatologist viewpoint

<https://www.ncbi.nlm.nih.gov/pubmed/36528653>

Systemic hypertension in preterm infants and neurodevelopmental outcomes

<https://www.ncbi.nlm.nih.gov/pubmed/36609483>

Exposure to maternal acetylsalicylic acid and the risk of bleeding events in extreme premature

neonates

<https://www.ncbi.nlm.nih.gov/pubmed/36914800>

The association between intrauterine exposure to opioids, tobacco, alcohol, and cannabis and length of birth hospitalization among neonates without NOWS

<https://www.ncbi.nlm.nih.gov/pubmed/37160977>

Neonatology

Red blood cell membrane-related gene variants and clinical risk factors in Chinese neonates with hyperbilirubinemia

<https://www.ncbi.nlm.nih.gov/pubmed/37040722>

A small-for-gestational-age infant with mirage syndrome who developed heat stroke and rhabdomyolysis due to severe temperature instability

<https://www.ncbi.nlm.nih.gov/pubmed/37044079>

Interleukin-33 and soluble st2 levels in infants with hypoxic-ischemic encephalopathy

<https://www.ncbi.nlm.nih.gov/pubmed/36996771>

Resonance Raman spectroscopy tissue oxygenation measurements in neonates

<https://www.ncbi.nlm.nih.gov/pubmed/36996764>

Impact of retinopathy of prematurity on visual motor integration

<https://www.ncbi.nlm.nih.gov/pubmed/36996795>

Effect of fentanyl for preterm infants on mechanical ventilation: a systematic review and meta-analysis

<https://www.ncbi.nlm.nih.gov/pubmed/36990067>

Neonatal diagnosis of alveolar capillary dysplasia via rapid genomic sequencing: a new gold standard?

<https://www.ncbi.nlm.nih.gov/pubmed/36944323>

Improving the clinical interpretation of transcutaneous carbon dioxide and oxygen measurements in the neonatal intensive care unit

<https://www.ncbi.nlm.nih.gov/pubmed/36996768>

The delicate skin of preterm infants: barrier function, immune-microbiome interaction, and clinical implications

<https://www.ncbi.nlm.nih.gov/pubmed/36934717>

Biochemical and lung function test accuracy for predicting the need for surfactant therapy in preterm infants: a systematic review

<https://www.ncbi.nlm.nih.gov/pubmed/36516800>

A narrative review of the rationale for conducting neonatal emergency studies with a waived or deferred consent approach

<https://www.ncbi.nlm.nih.gov/pubmed/37231967>

Indomethacin prophylaxis is associated with reduced risk of intraventricular hemorrhage in extremely preterm infants born in the context of amniotic infection syndrome

<https://www.ncbi.nlm.nih.gov/pubmed/37257433>

Melatonin alters innate immune function in infants with neonatal encephalopathy

<https://www.ncbi.nlm.nih.gov/pubmed/37321183>

American Journal of Perinatology

Maternal and neonatal outcomes in nulliparous participants undergoing labor induction by cervical ripening method

<https://pubmed.ncbi.nlm.nih.gov/34352922/>

Prediction and prevention of preterm birth: a prospective, randomized intervention trial

<https://pubmed.ncbi.nlm.nih.gov/34399434/>

Predicting cardiac anatomy, physiology, and surgical management based on fetal echocardiography in heterotaxy syndrome

<https://pubmed.ncbi.nlm.nih.gov/34282574/>

Early transient hypoglycemia and test performance in at-risk newborns

<https://pubmed.ncbi.nlm.nih.gov/34331300/>

Radiation exposure in the neonatal intensive care unit in newborns and staff

<https://pubmed.ncbi.nlm.nih.gov/34320679/>

Neonatal gastric perforation: 14-year experience from a tertiary neonatal intensive care unit

<https://pubmed.ncbi.nlm.nih.gov/34327684/>

Umbilical cord blood use for admission blood tests of VLBW preterm neonates: a randomized control trial <https://pubmed.ncbi.nlm.nih.gov/34407547/>

Physician perceptions on quality of life and resuscitation preferences for extremely early newborns

<https://pubmed.ncbi.nlm.nih.gov/34352923/>

Journal of Neonatal-Perinatal Medicine

No new content

Maternal Health, Neonatology and Perinatology

Benzylpenicillin concentrations in umbilical cord blood and plasma of premature neonates following intrapartum doses for group B streptococcal prophylaxis (PDF)

<https://mhnpjjournal.biomedcentral.com/counter/pdf/10.1186/s40748-023-00163-3.pdf>

Neoreviews

Gastrointestinal bleeding in the neonate: updates on diagnostics, therapeutics, and management

<https://pubmed.ncbi.nlm.nih.gov/37391655/>

Cystic fibrosis-associated gastrointestinal disease in neonates

<https://pubmed.ncbi.nlm.nih.gov/37391660/>

Pediatric intestinal transplantation management and outcomes

<https://pubmed.ncbi.nlm.nih.gov/37391657/>

Extensive brain lesions in a preterm neonate

<https://pubmed.ncbi.nlm.nih.gov/37391658/>

Late-onset respiratory distress in a very preterm neonate

<https://pubmed.ncbi.nlm.nih.gov/37391659/>

A term neonate with persistent respiratory distress

<https://pubmed.ncbi.nlm.nih.gov/37391663/>

Sickle cell crises in pregnancy: fetal and neonatal implications

<https://pubmed.ncbi.nlm.nih.gov/37391656/>

Gastrointestinal complications in infants with congenital diaphragmatic hernia

<https://pubmed.ncbi.nlm.nih.gov/37391662/>

Follow-up for a preterm infant with subglottic stenosis

<https://pubmed.ncbi.nlm.nih.gov/37391661/>

JAMA Pediatrics

Efficacy of a vibrating crib mattress to reduce pharmacologic treatment in opioid-exposed newborns - a randomized clinical trial

<https://pubmed.ncbi.nlm.nih.gov/37184872/>

Maternal opioid use disorder and the risk of postneonatal infant mortality

<https://pubmed.ncbi.nlm.nih.gov/37155175/>

Human papillomavirus transmission and persistence in pregnant women and neonates

<https://pubmed.ncbi.nlm.nih.gov/37213128/>

Fetal cardiac function at midgestation in women who subsequently develop gestational diabetes

<https://pubmed.ncbi.nlm.nih.gov/37184868/>

What parents should know about returning to work while breastfeeding

<https://pubmed.ncbi.nlm.nih.gov/37213110/>

Effect measure modification by birth weight on the association between overweight or obesity and hypertension in children and adolescents

<https://pubmed.ncbi.nlm.nih.gov/37155182/>

BMC Pediatrics

Sildenafil for congenital heart diseases induced pulmonary hypertension, a meta-analysis of randomized controlled trials

<https://pubmed.ncbi.nlm.nih.gov/37474896/>

A rare cause of air-leak syndrome in a premature newborn: a case report

<https://pubmed.ncbi.nlm.nih.gov/37442972/>

Clinical effect of early enteral nutrition support on critically ill neonates with extracorporeal membrane oxygenation

<https://pubmed.ncbi.nlm.nih.gov/37442946/>

Changes in the patterns of respiratory support and incidence of bronchopulmonary dysplasia; a single center experience

<https://pubmed.ncbi.nlm.nih.gov/37442954/>

Patent ductus arteriosus and increased conjugated bilirubin in the second week after birth are independent risk factors for necrotizing enterocolitis in preterm infants: an observational study

<https://pubmed.ncbi.nlm.nih.gov/37442980/>

Congenital heart diseases with airway stenosis: a predictive nomogram to risk-stratify patients without airway intervention

<https://pubmed.ncbi.nlm.nih.gov/37438689/>

Think out of the box: association of left congenital diaphragmatic hernia and abnormal origin of the right pulmonary artery

<https://pubmed.ncbi.nlm.nih.gov/37434143/>

Effect of reduced versus usual lipid emulsion dosing on bilirubin neurotoxicity and neurodevelopmental impairment in extremely preterm infants: study protocol for a randomized controlled trial

<https://pubmed.ncbi.nlm.nih.gov/37430233/>

Pediatric Critical Care Medicine

No relevant articles

New England Journal of Medicine

Potential for maternally administered vaccine for infant group b streptococcus

<https://pubmed.ncbi.nlm.nih.gov/37467497/>

Lancet

No relevant articles

JAMA

No relevant articles

BMJ

No relevant articles

Pediatric Infectious Disease Journal

No relevant articles

Pediatric Cardiology

No relevant content

Pediatric Neurology

Normal outcome with prenatal intervention for riboflavin transporter defect

<https://pubmed.ncbi.nlm.nih.gov/37116404/>

Massive neonatal arterial ischemic stroke

<https://pubmed.ncbi.nlm.nih.gov/37087915/>

Using neonatal magnetic resonance imaging to predict gross motor disability at four years in term-born children with neonatal encephalopathy

<https://pubmed.ncbi.nlm.nih.gov/37148603/>

Utilizing international classification of diseases codes to identify shoulder dystocia and neonatal brachial plexus injury

<https://pubmed.ncbi.nlm.nih.gov/37244217/>

Obstetrics and Gynecology

No new content

American Journal of Obstetrics & Gynecology

The ADENO study: ADenomyosis and its effect on neonatal and obstetric outcomes: a retrospective population-based study

<https://pubmed.ncbi.nlm.nih.gov/36539028/>

Personalized stratification of pregnancy care for small for gestational age neonates from biophysical markers at midgestation

<https://pubmed.ncbi.nlm.nih.gov/36596441/>

Hospital Pediatrics

Implementation of ESC QI initiative in neonatal unit setting and adaptation during the pandemic

<https://pubmed.ncbi.nlm.nih.gov/37366013/>

Decreasing percentage of infants with very low 5-minute apgar scores at a safety-net level III NICU

<https://pubmed.ncbi.nlm.nih.gov/37259189/>

BASIC SCIENCE SELECTIONS

ETS1 ameliorates hyperoxia-induced bronchopulmonary dysplasia in mice by activating Nrf2/HO-1 mediated ferroptosis

<https://www.ncbi.nlm.nih.gov/pubmed/37490064>

MicroRNA dysregulation in the heart and lung of infants with bronchopulmonary dysplasia

<https://www.ncbi.nlm.nih.gov/pubmed/37098830>

METTL3 promotes hyperoxia-induced pyroptosis in neonatal bronchopulmonary dysplasia by inhibiting ATG8-mediated autophagy

<https://www.ncbi.nlm.nih.gov/pubmed/37478627>

Type 2 innate lymphoid cell-derived amphiregulin regulates type II alveolar epithelial cell transdifferentiation in a mouse model of bronchopulmonary dysplasia

<https://www.ncbi.nlm.nih.gov/pubmed/37480752>

Early life surfactant protein-D levels in broncho-alveolar lavage fluids of extremely preterm neonates

<https://www.ncbi.nlm.nih.gov/pubmed/37489844>

Construction of a Synthetic Colostrum Substitute and Its Protection of Intestinal Cells against Inflammation in an In Vitro Model of Necrotizing Enterocolitis

<https://www.ncbi.nlm.nih.gov/pubmed/37480336>

Human milk oligosaccharides reduce necrotizing enterocolitis-induced neuroinflammation and cognitive impairment in mice

<https://www.ncbi.nlm.nih.gov/pubmed/37120853>

Ocular manifestations of congenital anomalies of the kidney and urinary tract (CAKUT)

<https://www.ncbi.nlm.nih.gov/pubmed/37468646>

ADDITIONAL JOURNAL SELECTIONS

Lung biopsy in infants with severe bronchopulmonary dysplasia

<https://www.ncbi.nlm.nih.gov/pubmed/37133233>

Predictors for invasive home mechanical ventilation duration in bronchopulmonary dysplasia

<https://www.ncbi.nlm.nih.gov/pubmed/37114844>

Obstructive sleep apnea is associated with use of assisted ventilation among children with bronchopulmonary dysplasia hospitalized with respiratory illness: A nationwide inpatient cohort

<https://www.ncbi.nlm.nih.gov/pubmed/37467551>

Thresholds for surfactant use in preterm neonates: a network meta-analysis

<https://www.ncbi.nlm.nih.gov/pubmed/36600484>

Fetal hemoglobin, blood transfusion, and retinopathy of prematurity in preterm infants: An observational, prospective study

<https://www.ncbi.nlm.nih.gov/pubmed/37417124>

Survey of transfusion practices in preterm infants in Europe

<https://www.ncbi.nlm.nih.gov/pubmed/36653173>

Is there room for prompt routine ophthalmic examination in neonates with congenital cytomegalovirus (CMV) infection during the neonatal period?

<https://www.ncbi.nlm.nih.gov/pubmed/37415020>

Using adenosine triphosphate bioluminescence level monitoring to identify bacterial reservoirs during two consecutive Enterococcus faecium and Staphylococcus capitis nosocomial infection outbreaks at a neonatal intensive care unit

<https://www.ncbi.nlm.nih.gov/pubmed/37443079>

The Role of Albumin in the Diagnosis of Neonatal Sepsis Over the Last 11 Years: A Retrospective Study

<https://www.ncbi.nlm.nih.gov/pubmed/37489147>

Role of white blood cell count, immature to total ratio and c-reactive protein in early detection of clinically suspected neonatal sepsis

<https://www.ncbi.nlm.nih.gov/pubmed/37391965>

Substance use before or during pregnancy and the risk of child mortality, perinatal morbidities and congenital anomalies

<https://www.ncbi.nlm.nih.gov/pubmed/37431291>

Respiratory outcomes in preterm infants following intravitreal bevacizumab for retinopathy of prematurity-a 10-year matched case study

<https://www.ncbi.nlm.nih.gov/pubmed/37400566>