

Publications Working Group

[Ayan Rajgarhia](#), Page Editor - Children's Hospital of Orange County

Craig Nankervis - Nationwide Children's Hospital

Christopher Rouse - Massachusetts General Hospital for Children

Vineet Lamba - Sutter Medical Center Sacramento

Zeyar Htun - NYC Long Island School of Medicine

L. Corbin Downey - Atrium Health Wake Forest Baptist

American Academy
of Pediatrics



DEDICATED TO THE HEALTH OF ALL CHILDREN®

Section on Neonatal-Perinatal Medicine

ARTICLES OF INTEREST – November 2024

[Early newborn metabolic patterning and sudden infant death syndrome](#)

Scott P Oltman, Elizabeth E Rogers, Rebecca J Baer, et al. *JAMA Pediatr*

This case control study nested within a retrospective cohort included infants born between 2005 and 2011 with full metabolic data collected as part of routine newborn screening (NBS). SIDS cases were matched to controls at a ratio of 1:4 by gestational age and birth weight z score. Of 2,276,578 eligible infants, 354 SIDS (0.016%) cases (mean [SD] gestational age, 38.3 [2.3] weeks; 220 male [62.1%]) and 1416 controls (mean [SD] gestational age, 38.3 [2.3] weeks; 723 male [51.1%]) were identified. In multivariable analysis, 14 NBS metabolites were significantly associated with SIDS in a univariate analysis: 17-hydroxyprogesterone, alanine, methionine, proline, tyrosine, valine, free carnitine, acetyl-L-carnitine, malonyl carnitine, glutaryl carnitine, lauroyl-L-carnitine, dodecenoylcarnitine, 3-hydroxytetradecanoylcarnitine, and linoleoylcarnitine.

[Association between SARS-CoV-2 infection and adverse perinatal outcomes by race/ethnicity in a large integrated health care system.](#)

Darios Getahun, Morgan R Peltier, Lawrence D Lurvey, et al. *Am J Perinatol*.

This retrospective cohort study included 67,986 pregnant women between April 6, 2020, and December 31, 2021. Upon admission to labor and delivery, all women were routinely tested for coronavirus disease 2019 (COVID-19) using real-time reverse-transcriptase polymerase chain reaction test. During the study period, COVID-19 was diagnosed in 4,960 (7%) of singleton pregnancies, with the highest rates observed

among Hispanics (9.4%) and non-Hispanic Blacks (6.2%). Neonates of all races/ethnicities, except for non-Hispanic Blacks, showed significantly increased odds of SARS-CoV-2 infection, with the highest risk observed among Asians/Pacific Islanders (aOR: 10.88, 95% CI: 1.33, 89.04). Non-Hispanic Black, Hispanic, and Asian/Pacific Islander mothers who tested positive for SARS-CoV-2 prenatally, were at increased risk for preeclampsia/eclampsia, and preterm birth as compared to non-Hispanic White mothers.

[The HYdrocortisone for Bronchopulmonary Dysplasia Respiratory and Developmental \(HYBRiD\) outcomes study: protocol for a longitudinal cohort study](#)

Sara B DeMauro, Haresh Kirpalani, Kristina Ziolkowski, et al. *BMC Pediatr.*

The HYdrocortisone for BPD Respiratory and Developmental (HYBRiD) Outcomes Study extends follow-up of all surviving children enrolled in the Hydrocortisone for BPD Trial until early school age and will be the largest and most comprehensive evaluation to date of the functional early school age outcomes of children with a history of severe neonatal lung disease and of children exposed to HC during infancy. This will substantially improve understanding of the longer-term implications of severe neonatal lung disease; provide data to facilitate the development of future randomized intervention trials in this population; and inform public policy by enhancing knowledge about school age resource requirements in children with a history of prematurity and lung disease.

[Oral sildenafil versus bosentan for treatment of persistent pulmonary hypertension of the newborn: a randomized controlled trial](#)

Aditya Kallimath, Sujata Deshpande, Pari Singh, et al. *BMC Pediatr.*

The authors aimed to compare oral sildenafil and bosentan as monotherapy in the treatment of neonates with PPHN. In this single-centre open-label randomized controlled trial (RCT), thirty-six term and late preterm neonates with PPHN, defined as pulmonary arterial systolic pressure (PASP) > 35 mmHg and requiring fraction of inspired oxygen (FiO₂) > 0.21, were randomized to receive oral sildenafil and bosentan. The primary outcome was reduction of PASP by 25% within 48 h after start of drug. Sildenafil was associated with quicker reduction of PASP and FiO₂ in neonates with PPHN, as compared to bosentan. Large multicentre blinded trials to assess efficacy and safety of bosentan in comparison with other pulmonary vasodilators would help to get a clearer understanding of its role in the management of PPHN, particularly for use in resource-limited settings that lack iNO.

[Clonidine as monotherapy for neonatal opioid withdrawal syndrome: a randomized trial](#)

Henrietta S Bada, Philip M Westgate, Thitinart Sithisarn, et al. *Pediatrics*

This intention-to-treat, double-blind trial, with treatment randomized between clonidine and morphine for NOWS. Enrollment criteria included prenatal opioid exposure, age ≤ 7 days, gestational age ≥ 35 weeks, no other medical condition, and need for pharmacotherapy. Primary outcomes were length of treatment and neurobehavioral performance. 120 infants required treatment and were randomized to receive oral clonidine (n = 60) at 1 $\mu\text{g}/\text{kg}/\text{dose}$ or morphine (n = 60), 0.06 $\text{mg}/\text{kg}/\text{dose}$, every 3 hours. Infants with no improvement had their doses increased by 25% of the initial dose every 12 to 24 hours. Those without improvement by the fourth dose increase, received adjunct therapy. Length of treatment did not differ between morphine and clonidine, with median (95% confidence interval [CI]) days, respectively, of 15 (13–17) and 17 (15–19), $P = .48$. More clonidine-treated infants (45%) needed adjunct therapy versus 10% in the morphine group, adjusted odds ratio (95% CI) = 8.85 (2.87–27.31). After treatment completion, the NICU Network Neurobehavioral Scales summary scores did not differ between clonidine-treated and morphine-treated infants. The results of this study suggests Clonidine appears to be an effective non-opioid medication to treat NOWS but may require adjust therapy in almost half of patients. However, this may still limit net opioid exposure.

[Blocking IL-17a signaling decreases lung inflammation and improves alveolarization in experimental bronchopulmonary dysplasia](#)

Meagan Goates, Amrit Shrestha, Shyam Thapa, et al. *Am J Pathol*

Although the proinflammatory cytokine, IL-17a, plays a role in various neonatal inflammatory disorders, its role in BPD pathogenesis is unclear. This study tests the hypothesis that blocking IL-17a signaling decreases lipopolysaccharide (LPS)-mediated experimental BPD in neonatal mice. LPS-injected mice had higher pulmonary IL-17a protein levels and IL-17a(+) and IL-22(+) cells. LPS-mediated alveolar simplification, apoptosis, and cell proliferation inhibition were significantly greater in mice treated with isotype Ab than in those treated with IL-17a Ab. Furthermore, STAT1 activation and IL-6 levels were significantly greater in LPS-exposed mice treated with isotype Ab than in those treated with IL-17a Ab. The study results indicate that blocking IL-17a signaling decreases LPS-mediated experimental BPD.

[Transplanted deep-layer cortical neuroblasts integrate into host neural circuits and alleviate motor defects in hypoxic-ischemic encephalopathy injured mice](#)

Mengnan Wu, Yuan Xu, Xiaoli Ji, et al. *Stem Cell Res Ther*

Human embryonic stem cell (hESCs)-derived cortical neural progenitors have shown great potentials in ischemic stroke in adult brain. However, it is unclear whether they are feasible for cortical reconstruction in immature brain with hypoxic-ischemic encephalopathy. Transplantation of human cortical neural progenitor cells (hCNPs) in HIE-injured cortex exhibited long-term graft overgrowth. DAPT pre-treatment successfully synchronized hCNPs from different developmental stages (day 17, day 21, day 28) to deep layer cortical neuroblasts which survived well in HIE injured brain and greatly prevented graft overgrowth after transplantation. Importantly, the cortical neuroblasts primarily differentiated into deep-layer cortical neurons and extended long axons to their projection targets, such as the cortex, striatum, thalamus, and internal capsule in both ipsilateral and contralateral HIE-injured brain. The transplanted cortical neurons established synapses with host cortical neurons and exhibited spontaneous excitatory or inhibitory post-synaptic currents (sEPSCs or sIPSCs) five months post-transplantation. Rotarod and open field tests showed greatly improved animal behavior by intra-cortex transplantation of deep layer cortical neuroblasts in HIE injured brain. Transplanted hESCs derived cortical neuroblasts survive, project to endogenous targets, and integrate into host cortical neural circuits to rescue animal behavior in the HIE-injured brain without graft overgrowth, providing a novel and safe cell replacement strategy for the future treatment of HIE.

[The effect of virtual reality on the breastfeeding process: a randomized controlled study](#)

Ummuhan Kilic, Mevlude Arar, Muhammet Ali Oruc, et al. *J Perinatol*

This study utilized virtual reality (VR) to assess breastfeeding success and breastfeeding self-efficacy for mothers after cesarean section delivery. There was a total of 66 mothers included in the study; 31 in control and 35 in intervention (VR) group. The control group received standard breastfeeding training while the intervention group watched a breastfeeding video with VR in the 4th and 24th hours after cesarean delivery. The mothers in the VR group were found to have higher mean scores for the Breastfeeding Self-Efficacy Scale in the 4th and 24th hours and higher Mean LATCH scores compared to the control group. Virtual reality appears to be a useful tool in helping mothers breastfeed. Further studies could be useful to assess if VR can be helpful in other ways with breastfeeding.

[Feasibility of intranasal human milk as stem cell therapy in preterm infants with intraventricular hemorrhage](#)

Rebecca Hoban, Alessia Gallipoli, Marisa Signorile, et al. *J Perinatol*

Stem cell (SC) therapies have been proposed to treat brain injury showing neuroprotection and improved outcomes. Fresh human milk (HM) contains pluripotent SCs that share markers with both mesenchymal and embryonic stem cells and can form neuronal cells in vitro. The nares could be an ideal route for HM SC therapy. Previous observational study showed that the infants who received intranasal BM had a trend for less severe porencephalic defects. This is a phase 1 study that aimed to determine if fresh mother's own milk can be feasibly delivered intranasally as SC therapy to preterm infants with IVH. 37 Infants (mean gestation 27.7 ± 2.6 weeks, birthweight 1030 ± 320 g) with IVH (35.1% grade IV) were recruited. Intranasal milk was given twice daily until 28 days of age. No major safety reactions were noted. Unfortunately, no clinical outcomes were reported from this study.

OTHER NOTEWORTHY PUBLICATIONS – November 2024

Pediatrics

RSV neutralizing antibodies following nirsevimab and palivizumab dosing

<https://www.ncbi.nlm.nih.gov/pubmed/39350745>

Clonidine as monotherapy for neonatal opioid withdrawal syndrome: a randomized trial

<https://www.ncbi.nlm.nih.gov/pubmed/39403061>

Journal of Pediatrics

Anticipating the effects of Accreditation Council for Graduate Medical Education-mandated residency curriculum changes on neonatal intensive care unit staffing models and costs

<https://pubmed.ncbi.nlm.nih.gov/39053882>

Assessment of ventricular size and neurocognitive outcomes in children with postnatal closure of myelomeningocele

<https://pubmed.ncbi.nlm.nih.gov/38944186>

Microbiome and growth in infants with congenital heart disease

<https://pubmed.ncbi.nlm.nih.gov/38944188>

Phototherapy alters the plasma metabolite profile in infants born preterm with hyperbilirubinemia

<https://pubmed.ncbi.nlm.nih.gov/38945444>

Resource and service use after discharge among infants 22-25 weeks estimated gestational age at the first high-risk infant follow-up visit in California

<https://pubmed.ncbi.nlm.nih.gov/38945445>

Practice variations for therapeutic hypothermia in neonates with hypoxic-ischemic

encephalopathy: an international survey

<https://pubmed.ncbi.nlm.nih.gov/38950817>

Inpatient skin-to-skin care predicts 12-month neurodevelopmental outcomes in very preterm infants

<https://pubmed.ncbi.nlm.nih.gov/39004169>

Greater neighborhood disadvantage is associated with alterations in fetal functional brain network structure

<https://pubmed.ncbi.nlm.nih.gov/39032768>

Giant umbilical cord due to excessive wharton's jelly

<https://pubmed.ncbi.nlm.nih.gov/39019320>

Blue scrotum as a sign of neonatal adrenal hemorrhage

<https://pubmed.ncbi.nlm.nih.gov/38986928>

Pediatric Research

The importance of everyday factors in pediatric neurodevelopment

<https://pubmed.ncbi.nlm.nih.gov/39558118/>

The effect of early postnatal auditory stimulation on outcomes in preterm infants

<https://pubmed.ncbi.nlm.nih.gov/38909158/>

Brain health in preterm infants: importance of early-life pain and analgesia exposure

<https://pubmed.ncbi.nlm.nih.gov/38806664/>

Advances in fetal and neonatal neuroimaging and everyday exposures

<https://pubmed.ncbi.nlm.nih.gov/38877283/>

Prenatal social determinants of health: Narrative review of maternal environments and neonatal brain development

<https://pubmed.ncbi.nlm.nih.gov/38961164/>

Neonatal dysglycemia: a review of dysglycemia in relation to brain health and neurodevelopmental outcomes

<https://pubmed.ncbi.nlm.nih.gov/38972961/>

Optimal presence: enhancing parent integration to maximize neurodevelopmental outcomes in preterm infants

<https://pubmed.ncbi.nlm.nih.gov/39147904/>

Assessment of intensive care unit delirium in developmentally delayed children

<https://pubmed.ncbi.nlm.nih.gov/39210052/>

Beyond the incubator: applying a “one health” approach in the NICU

<https://pubmed.ncbi.nlm.nih.gov/39215199/>

Expanding the horizon of continuous glucose monitoring into the future of pediatric medicine

<https://pubmed.ncbi.nlm.nih.gov/39306610/>

Home-ics: how experiences of the home impact biology and child neurodevelopmental outcomes

<https://pubmed.ncbi.nlm.nih.gov/39333388/>

Enhancing daily life for children with cognitive developmental delay through insights into brain development

<https://pubmed.ncbi.nlm.nih.gov/39424896/>

Sleep as a driver of pre- and postnatal brain development

<https://pubmed.ncbi.nlm.nih.gov/38956219/>

Psychological distress in the neonatal intensive care unit: a meta-review

<https://pubmed.ncbi.nlm.nih.gov/39327462/>

Archives of Disease in Childhood - Fetal & Neonatal Edition

Role of beta-hydroxybutyrate measurement in the evaluation of plasma glucose concentrations in newborn infants

<https://pubmed.ncbi.nlm.nih.gov/38429075/>

Respiratory outcomes and survival after unplanned extubation in the NICU: a prospective cohort study from the SEPREEN trial

<https://pubmed.ncbi.nlm.nih.gov/38636983/>

Early and extended erythropoietin monotherapy after hypoxic ischaemic encephalopathy: a multicentre double-blind pilot randomised controlled trial

<https://pubmed.ncbi.nlm.nih.gov/38729748/>

Associations between physical activity and development in preschool-aged children born <30 weeks' gestation: a cohort study

<https://pubmed.ncbi.nlm.nih.gov/38408793/>

Factors that impact second attempt success for neonatal intubation following first attempt failure: a report from the National Emergency Airway Registry for Neonates

<https://pubmed.ncbi.nlm.nih.gov/38418208/>

Outcomes following the adoption of standard parenteral nutrition in preterm infants: a whole-population non-concurrent control study

<https://pubmed.ncbi.nlm.nih.gov/38442954/>

Vibration-based mitigation of noxious-evoked responses to skin puncture in neonates and infants: a randomised controlled trial

<https://pubmed.ncbi.nlm.nih.gov/38479794/>

Kangaroo mother care improves cardiorespiratory physiology in preterm infants: an observational study

<https://pubmed.ncbi.nlm.nih.gov/38538151/>

Can transcutaneous bilirubinometry safely be used to monitor rebound hyperbilirubinaemia after phototherapy in neonates ≥ 35 weeks' gestation? A prospective, comparative study

<https://pubmed.ncbi.nlm.nih.gov/38604650/>

Skin-to-skin stabilisation and uninterrupted respiratory support for preterm infants after birth: feasibility of a new and simplified rPAP system

<https://pubmed.ncbi.nlm.nih.gov/38514168/>

Are toddlers with neurosensory impairment more difficult to follow up? A secondary analysis of the hPOD follow-up study

<https://pubmed.ncbi.nlm.nih.gov/38604648/>

Parent screening questionnaires to detect cognitive and language delay at 2 years in high-risk infants: an analysis from the Victorian Infant Collaborative Study 2016–2017 cohort

<https://pubmed.ncbi.nlm.nih.gov/38604647/>

Maternal and infant outcomes in women with sickle cell disease: a matched cohort study

<https://pubmed.ncbi.nlm.nih.gov/38604649/>

Use of neonatal lung ultrasound in European neonatal units: a survey by the European Society of Paediatric Research

<https://pubmed.ncbi.nlm.nih.gov/38604653/>

Knee-to-chest flexion manoeuvre to reduce respiratory distress after planned caesarean birth: a feasibility study

<https://pubmed.ncbi.nlm.nih.gov/38719430/>

Gastrointestinal effects of caffeine in preterm infants: a systematic review and Bayesian meta-analysis

<https://pubmed.ncbi.nlm.nih.gov/38649257/>

Journal of Perinatology

Maternity care practices supportive of breastfeeding in U.S. advanced neonatal care units, United States, 2022

<https://pubmed.ncbi.nlm.nih.gov/39375497/>

The impact of exclusive human milk diet on short-term growth of very preterm infants

<https://pubmed.ncbi.nlm.nih.gov/38678082/>

Point-of-care human milk concentration by passive osmosis: comprehensive analysis of fresh human milk samples

<https://pubmed.ncbi.nlm.nih.gov/38760580/>

Implementation of a clinically integrated breastfeeding peer counselor program

<https://pubmed.ncbi.nlm.nih.gov/38750195/>

Immediate fortification of human milk with a bovine milk-derived human milk fortifier in very low birth weight infants: a randomized clinical trial

<https://pubmed.ncbi.nlm.nih.gov/38724605/>

Early postpartum pumping behaviors, pumped milk volume, and achievement of secretory activation in breast pump-dependent mothers of preterm infants

<https://pubmed.ncbi.nlm.nih.gov/38851855/>

Selenium concentrations in expressed human milk: a systematic review and meta-analysis

<https://pubmed.ncbi.nlm.nih.gov/39014010/>

The effect of virtual reality on the breastfeeding process: a randomized controlled study

<https://pubmed.ncbi.nlm.nih.gov/39085438/>

Insulin-like growth factor-1 and insulin-like growth factor binding protein-3 as early predictors of growth, body composition, and neurodevelopment in preterm infants

<https://pubmed.ncbi.nlm.nih.gov/38561392/>

Maternal stress and breastfeeding outcomes in the NICU couplet care experience: a prospective cohort study

<https://pubmed.ncbi.nlm.nih.gov/38755256/>

Method of home tube feeding and 2–3-year neurodevelopmental outcome

<https://pubmed.ncbi.nlm.nih.gov/38811755/>

The impact of implementation of oral dextrose gel on the incidence of multiple hypoglycemia events in the well newborn nursery

<https://pubmed.ncbi.nlm.nih.gov/38926525/>

Prophylactic dextrose gel use in newborns at risk for hypoglycemia

<https://pubmed.ncbi.nlm.nih.gov/39363038/>

Effect of maternal diabetes on time to full oral feedings in infants admitted to the neonatal intensive care unit

<https://pubmed.ncbi.nlm.nih.gov/39112613/>

Feasibility of intranasal human milk as stem cell therapy in preterm infants with intraventricular hemorrhage

<https://pubmed.ncbi.nlm.nih.gov/38688998/>

Predicting iatrogenic adrenal insufficiency in neonates exposed to prolonged steroid courses: do cortisol levels help?

<https://pubmed.ncbi.nlm.nih.gov/38769337/>

Antenatal exposure to magnesium sulfate and neonatal outcomes in very low birth weight infants: a multicenter study

<https://pubmed.ncbi.nlm.nih.gov/38844521/>

Pain and heart rate variability in neonates receiving dexmedetomidine

<https://pubmed.ncbi.nlm.nih.gov/39033232/>

Impact of breast milk on cortical pain response in newborns during the heel prick procedure: a randomized controlled trial

<https://pubmed.ncbi.nlm.nih.gov/39134667/>

A comparison of the effect of procedural pain on cerebral oxygen saturation between late preterm and term infants

<https://pubmed.ncbi.nlm.nih.gov/38789794/>

Introduction of oral feeding in premature infants on high flow nasal cannula in a level IV neonatal intensive care unit: a quality improvement initiative

<https://pubmed.ncbi.nlm.nih.gov/38714842/>

Neonatology

No new articles

American Journal of Perinatology

Prevalence and outcomes of gastrointestinal anomalies in Down syndrome

<https://pubmed.ncbi.nlm.nih.gov/38744322/>

Prenatal exposure to acid suppressor medications and development of ductus arteriosus in term newborns

<https://pubmed.ncbi.nlm.nih.gov/38537691/>

Gestational age-specific markers associated with postnatal intervention in fetal suspicion of coarctation of the aorta

<https://pubmed.ncbi.nlm.nih.gov/38569505/>

Association between SARS-CoV-2 infection and adverse perinatal outcomes by race/ethnicity in a large integrated health care system

<https://pubmed.ncbi.nlm.nih.gov/35738286/>

Comparing fetal ultrasound biometric measurements to neonatal anthropometry at the extremes of birth weight

<https://pubmed.ncbi.nlm.nih.gov/38569506/>

Clinical and growth correlates of retinopathy of prematurity in preterm infants with surgical necrotizing enterocolitis and intestinal perforation

<https://pubmed.ncbi.nlm.nih.gov/38565196/>

Journal of Neonatal-Perinatal Medicine

No new articles

Maternal Health, Neonatology and Perinatology

Evaluation of criterion-based audit in improving quality of neonatal birth asphyxia care at Balaka district hospital in Malawi

<https://www.ncbi.nlm.nih.gov/pubmed/39491034>

Determinants of macrosomia among newborns delivered in Jigjiga City, Eastern Ethiopia: a case-control study

<https://www.ncbi.nlm.nih.gov/pubmed/39511659>

Neoreviews

Disorders of coagulation in the newborn

<https://www.ncbi.nlm.nih.gov/pubmed/39482239>

Thrombotic disorders in the newborn

<https://www.ncbi.nlm.nih.gov/pubmed/39482244>

Hemoglobinopathies in the neonate

<https://www.ncbi.nlm.nih.gov/pubmed/39482242>

Term neonate with right-sided limb swelling: a potpourri of etiology and complication

<https://www.ncbi.nlm.nih.gov/pubmed/39482247>

Alloimmunization in pregnancy: implications for the fetus and neonate.

<https://www.ncbi.nlm.nih.gov/pubmed/39482241>

Pallister Killian syndrome

<https://www.ncbi.nlm.nih.gov/pubmed/39482245>

JAMA Pediatrics

Early newborn metabolic patterning and sudden infant death syndrome

<https://pubmed.ncbi.nlm.nih.gov/39250160>

Paternal age and the risk of trisomy 21

<https://pubmed.ncbi.nlm.nih.gov/39348140>

BMC Pediatrics

Cerebral palsy: potential risk factors and functional status among children under three years, a case-control study in northwest Iran

<https://pubmed.ncbi.nlm.nih.gov/39482607/>

Association between glycemia and outcomes of neonates with hypoxic-ischemic encephalopathy: a systematic review and meta-analysis

<https://pubmed.ncbi.nlm.nih.gov/39501186/>

An analysis of vitamin K status in Chinese healthy children aged 0–18 years

<https://pubmed.ncbi.nlm.nih.gov/39506667/>

Significance of additional pulmonary blood flow between second and third stage in Fontan pathway

<https://pubmed.ncbi.nlm.nih.gov/39506657/>

Early postnatal growth failure in infants <1500 g in a Ugandan referral hospital: a retrospective cohort study

<https://pubmed.ncbi.nlm.nih.gov/39506674/>

An explainable deep learning model to predict partial anomalous pulmonary venous connection for patients with atrial septal defect

<https://pubmed.ncbi.nlm.nih.gov/39516757/>

Incidence of acute kidney injury and its predictors among neonates admitted at neonatal intensive care unit of, Northwest Ethiopia comprehensive specialized hospitals, 2023

<https://pubmed.ncbi.nlm.nih.gov/39528961/>

Motor outcomes in individuals born small for gestational age at term: a systematic review

<https://pubmed.ncbi.nlm.nih.gov/39528981/>

Cytokine and growth factor correlation networks associated with morbidities in extremely preterm infants

<https://pubmed.ncbi.nlm.nih.gov/39529072/>

Comparative evaluation of axillary and rectal temperatures across different gestational ages in newborns admitted to the neonatal intensive care unit: a cross-sectional study

<https://pubmed.ncbi.nlm.nih.gov/39533258/>

Ultrasonographic characteristics of neonatal appendicitis: a case series

<https://pubmed.ncbi.nlm.nih.gov/39543518/>

Expanding diversity within phenylketonuria in Ecuadorian patients: genetic analysis and literature review of newborn screenings

<https://pubmed.ncbi.nlm.nih.gov/39548419/>

Feasibility and safety of weaning premature infants from nasal continuous positive airway pressure to high-flow nasal cannula: a prospective observational case study

<https://pubmed.ncbi.nlm.nih.gov/39548415/>

Identification of risk factors for necrotizing enterocolitis in twins: a case-control matching analysis of over ten-years' experience

<https://pubmed.ncbi.nlm.nih.gov/39548407/>

The impact of group antenatal care on newborns: Results of a cluster randomized control trial in Eastern Region, Ghana

<https://pubmed.ncbi.nlm.nih.gov/39558280/>

A new clinical classification of congenital biliary dilatation – HUAXI CBD classification

<https://pubmed.ncbi.nlm.nih.gov/39563279/>

Evaluation of postoperative renal function in infants with congenital hydronephrosis using ROI from ultrasound technique in renography

<https://pubmed.ncbi.nlm.nih.gov/39574080/>

Development of a simplified model and nomogram for the prediction of pulmonary hemorrhage in respiratory distress syndrome in extremely preterm infants

<https://pubmed.ncbi.nlm.nih.gov/39574081/>

Socio-economic and geographical inequalities in neonatal mortality rates in Sierra Leone, 2008–2019

<https://pubmed.ncbi.nlm.nih.gov/39578763/>

Incidental identification of neonatal babesiosis: a case report

<https://pubmed.ncbi.nlm.nih.gov/39604915/>

Impact of normal vs. caesarean deliveries on child nutritional status and mortality in India: insights from NFHS-5 data

<https://pubmed.ncbi.nlm.nih.gov/39614186/>

NeoVault: empowering neonatal research through a neonate data hub

<https://pubmed.ncbi.nlm.nih.gov/39614275/>

Incidence rate and geographic distribution of congenital hypothyroidism in the southwest of Iran (Kohgiluyeh and Boyer Ahmad province) based on geographic information system since 2011–2020

<https://pubmed.ncbi.nlm.nih.gov/39614209/>

Pediatric Critical Care Medicine

Evaluation of a comprehensive algorithm for PICU patients with new fever or instability: association of clinical decision support with testing practices

<https://pubmed.ncbi.nlm.nih.gov/39028215/>

Diagnostic validation of the updated pediatric sepsis biomarker risk II for acute kidney injury prediction model in pediatric septic shock

<https://pubmed.ncbi.nlm.nih.gov/39115853/>

Comprehensive characterization of surface-bound proteins and measurement of fibrin fiber thickness on extracorporeal membrane oxygenation circuits collected from patients

<https://pubmed.ncbi.nlm.nih.gov/39145643/>

Airway anomalies in pediatric patients after surgery for congenital heart disease: single-center retrospective cohort study, Taiwan, 2017–2020

<https://pubmed.ncbi.nlm.nih.gov/39115820/>

Lancet

Global, regional, and national stillbirths at 20 weeks' gestation or longer in 204 countries and territories, 1990–2021: findings from the Global Burden of Disease Study 2021

<https://pubmed.ncbi.nlm.nih.gov/39510107/>

JAMA

No relevant articles

BMJ

No relevant articles

Pediatric Infectious Disease Journal

Antifungal drug usage in european neonatal units: a multicenter weekly point prevalence study

<https://pubmed.ncbi.nlm.nih.gov/38917027/>

Enhanced D614G and omicron variants antibody persistence in infants at 2 months of age following maternal mRNA booster vaccination during pregnancy or postpartum

<https://pmc.ncbi.nlm.nih.gov/articles/PMC9216723/>

Incidence, risk factors, short-term outcomes, and microbiome of ventilator-associated pneumonia in very-low-birth-weight infants: experience at a single level iii neonatal intensive care unit

<https://pubmed.ncbi.nlm.nih.gov/38900079/>

The role of breastfeeding in acute respiratory infections in infancy

<https://pubmed.ncbi.nlm.nih.gov/38986006/>

Clinical practice guidelines for the management of congenital cytomegalovirus infection in Japan 2023: executive summary

<https://pubmed.ncbi.nlm.nih.gov/39079035/>

Pediatric Cardiology

No new content

Pediatric Neurology

Clinician stakeholder experience with telemedicine consults to assess neonatal encephalopathy in a rural state

<https://pubmed.ncbi.nlm.nih.gov/39173305/>

Obstetrics and Gynecology

Pre-existing diabetes and stillbirth or perinatal mortality: a systematic review and meta-analysis

<https://pubmed.ncbi.nlm.nih.gov/39088826/>

Neonatal birth weight with daily compared with every-other-day glucose monitoring in gestational diabetes mellitus: a randomized controlled trial

<https://pubmed.ncbi.nlm.nih.gov/38330409/>

American Journal of Obstetrics & Gynecology

Perinatal outcomes of pregnancies following autologous cryopreserved ovarian tissue transplantation: a systematic review with pooled analysis

<https://pubmed.ncbi.nlm.nih.gov/38621483/>

Very young and advanced maternal age strongly elevates the occurrence of nonchromosomal congenital anomalies: a systematic review and meta-analysis of population-based studies

<https://pubmed.ncbi.nlm.nih.gov/38761840/>

Preterm birth in singleton pregnancies conceived by in vitro fertilization or intracytoplasmic sperm injection: an overview of systematic reviews

<https://pubmed.ncbi.nlm.nih.gov/38796038/>

Assisted reproductive technology and neurodevelopment in children at 1 year of age: a longitudinal birth cohort study

<https://pubmed.ncbi.nlm.nih.gov/38782229/>

The simultaneous occurrence of gestational diabetes and hypertensive disorders of pregnancy affects fetal growth and neonatal morbidity

<https://pubmed.ncbi.nlm.nih.gov/38492713/>

Angiogenic and vasoactive proteins in the maternal-fetal interface in healthy pregnancies and preeclampsia

<https://pubmed.ncbi.nlm.nih.gov/38494070/>

Placental differences between severe fetal growth restriction and hypertensive disorders of pregnancy requiring early preterm delivery: morphometric analysis of the villous tree supported by artificial intelligence

<https://pubmed.ncbi.nlm.nih.gov/38423447/>

The role of cell-free DNA biomarkers and patient data in the early prediction of preeclampsia: an artificial intelligence model

<https://pubmed.ncbi.nlm.nih.gov/38432413/>

Hospital Pediatrics

Improving admission temperature in infants ≥ 34 weeks' gestation: a quality improvement initiative

<https://pubmed.ncbi.nlm.nih.gov/39463236/>

Improving family-centered rounds with a nursing checklist in the electronic health care record

<https://pubmed.ncbi.nlm.nih.gov/39449662/>

Improving hospital-to-home for medically complex children: views from Spanish-speaking caregivers

<https://pubmed.ncbi.nlm.nih.gov/39410907/>

Nicu caregiver communication preferences and disparities by primary language: a qualitative study

<https://pubmed.ncbi.nlm.nih.gov/39439429/>

BASIC SCIENCE SELECTIONS

A rat model establishment of bronchopulmonary dysplasia-related lung & brain injury within 28 days after birth

<https://www.ncbi.nlm.nih.gov/pubmed/39609737>

Fingolimod, a sphingosine-1-phosphate receptor modulator, prevents neonatal bronchopulmonary dysplasia and subsequent airway remodeling in a murine model

<https://www.ncbi.nlm.nih.gov/pubmed/39262336>

Blocking IL-17a signaling decreases lung inflammation and improves alveolarization in experimental bronchopulmonary dysplasia

<https://www.ncbi.nlm.nih.gov/pubmed/39117111>

Development of a hybrid rhodamine-hydrazine NIR fluorescent probe for sensitive detection and imaging of peroxynitrite in necrotizing enterocolitis model

<https://www.ncbi.nlm.nih.gov/pubmed/39178703>

Lutein emulsion stabilized by a food-grade biopolymer enhanced lutein bioavailability and improved retinal vessel morphology in neonatal rats with retinopathy of prematurity

<https://www.ncbi.nlm.nih.gov/pubmed/39551359>

Enhancing late retinopathy of prematurity outcomes with fresh bone marrow mononuclear cells and melatonin combination therapy

<https://www.ncbi.nlm.nih.gov/pubmed/39503829>

Clinical

Greater and earlier exposure of mother's own milk compared to donor human milk moderates risk and severity of bronchopulmonary dysplasia

<https://www.ncbi.nlm.nih.gov/pubmed/39605248>

Persistent pulmonary hypertension in children after apparent resolution of ultrasound-defined pulmonary hypertension associated with bronchopulmonary dysplasia

<https://www.ncbi.nlm.nih.gov/pubmed/39557732>

Post-discharge growth among extremely preterm infants with or without bronchopulmonary dysplasia

<https://www.ncbi.nlm.nih.gov/pubmed/39513637>

Azithromycin for preventing bronchopulmonary dysplasia in extremely preterm infants: a cohort study

<https://www.ncbi.nlm.nih.gov/pubmed/39503175>

Outpatient inhaled corticosteroid use in bronchopulmonary dysplasia

<https://www.ncbi.nlm.nih.gov/pubmed/38874181>

Association of hypertensive disorder of pregnancy with necrotizing enterocolitis in very preterm infants: A retrospective cohort study

<https://www.ncbi.nlm.nih.gov/pubmed/39527615>

Intestinal fatty acid-binding protein as a marker of necrotizing enterocolitis incidence and severity: a scoping review

<https://www.ncbi.nlm.nih.gov/pubmed/39437600>

Clinical predictors of spontaneous intestinal perforation vs necrotizing enterocolitis in extremely and very low birth weight neonates

<https://www.ncbi.nlm.nih.gov/pubmed/39033072>

Association between glycemia and outcomes of neonates with hypoxic-ischemic encephalopathy: a systematic review and meta-analysis

<https://www.ncbi.nlm.nih.gov/pubmed/39501186>

Safety and tolerability of a Muse cell-based product in neonatal hypoxic-ischemic encephalopathy with therapeutic hypothermia (SHIELD trial)

<https://www.ncbi.nlm.nih.gov/pubmed/39401019>

Prediction of feeding difficulties in neonates with hypoxic-ischemic encephalopathy using magnetic resonance imaging-derived radiomics features

<https://www.ncbi.nlm.nih.gov/pubmed/39349660>