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Section on Neonatal-Perinatal Medicine

ARTICLES OF INTEREST – May, 2023

Neurodevelopmental consequences of preterm punctate white matter lesions: a systematic review
Clara Adriana Maria de Bruijn, Stefano Di Michele, Maria Luisa Tataranno et al. *Pediatr Res.*

This analysis included nine studies with a total of 1655 preterm infants in which punctate white matter lesions (PWML) on MRI around term-equivalent age and neurodevelopmental outcome at ≥12 months were reported. Mean incidence of isolated PWML was 22.1%. All studies showed a relationship between PWML and motor delay at ≥12 months. Six studies showed a significantly higher incidence of cerebral palsy in preterm infants with PWML. Two studies found a significant correlation between cognitive and behavioral outcomes and PWML. Finally, there was a directly proportional relationship between the number of lesions and the severity of impairments.

Neurological examination at 32-weeks postmenstrual age predicts 12-month cognitive outcomes in very preterm-born infants
Isabel U Huf, Emmah Baque, Paul B Colditz et al. *Pediatr Res.*

This prospective cohort study evaluated 119 infants (73 males; median 28.4 weeks gestational age at birth) who underwent early (30-32 weeks postmenstrual age) and term equivalent age Hammersmith Neonatal Neurological Examination (HNNE). At twelve months, 104 participants completed Bayley III Scales of Infant and Toddler Development. The authors found that early HNNE assessment had moderate diagnostic accuracy for cognitive outcomes at 12 months corrected age in infants born <31 weeks gestation. Early HNNE at 30-32 weeks had stronger predictive validity than HNNE at term equivalent age. The authors concluded that early HNNE may provide an early marker for risk-stratification to optimise the planning of post-discharge support and follow-up services for infants born preterm.

Prophylactic surfactant nebulisation for the early aeration of the preterm lung: a randomised clinical trial
Vincent D Gaertner, Stefan Minocchieri, Andreas D Waldmann, et al. *Arch Dis Child Fetal Neonatal Ed.*

Parallel, randomised clinical trial, conducted between March 2021 and January 2022 to determine whether prophylactic surfactant nebulisatoin (SN) improves early lung aeration. Data from 35 infants were collected, and primary outcome data were analysed from 32 infants (n=16/group) between 26 0/7 and 31 6/7 weeks of gestation. Prophylactic SN in the delivery room did not significantly affect end-expiratory lung impedance from birth to 30 min after birth and showed only minimal effects on lung physiology. Prophylactic SN in the DR was feasible. There were no differences in clinical outcomes.

Exposure to umbilical cord management approaches and death or neurodevelopmental impairment at 22–26 months' corrected age after extremely preterm birth

Sara C Handley, Neha Kumbhat, Barry Eggleston, et al. *Arch Dis Child Fetal Neonatal Ed.*

The goal of this study was to compare death or severe neurodevelopmental impairment (NDI) at 22-26 months' corrected age (CA) among extremely preterm infants following exposure to different forms of umbilical cord management. Infants born <27 weeks' gestation in 2016-2018 without severe congenital anomalies who received active treatment after birth and underwent neurodevelopmental assessments between 22 and 26 months' CA. Compared with Immediate cord clamping, delayed cord clamping exposure was associated with lower death or severe NDI at 22-26 months' CA among extremely preterm infants, which was not mediated by severe IVH.

COMFORTneo scale: a reliable and valid instrument to measure prolonged pain in neonates?
Naomi J Meesters, Tinne Dilles, Joost van Rosmalen, et al. *J Perinatol.*

In this prospective observational study, the authors studied the reliability and validity of the COMFORTneo scale which is designed to measure neonatal prolonged pain. They evaluated four clinimetric properties of the COMFORTneo scale from NICU nurses' assessments of neonates' pain. Pain scores using N-PASS were correlated with COMFORTneo scores to evaluate construct validity. They found that COMFORTneo can be used to reliably and validly assess pain in NICU patients.

Effects of prophylactic probiotics supplementation on infants born very preterm or very low birth weight
Arpitha Chiruvolu, Heather Hendrikson, Rachael Hanson et al. *J Perinatol.*

The authors sought to evaluate the effects of guideline-driven prophylactic supplementation of a multi-strain neonatal intensive care unit-specific probiotic product on infants born very preterm (VP) or very low birth weight (VLBW). They compared a prospective cohort of 125 infants born in one year after implementation who received probiotics to a retrospective cohort of eligible 126 VP or VLBW infants who did not receive probiotics. The primary outcome of interest was necrotizing enterocolitis (NEC). They found that, although nonsignificant, prophylactic probiotics supplementation in infants born VP or VLBW was associated with reduction of NEC.

Early antibiotic use and neonatal outcomes among preterm infants without infections
Weiyin Yu, Lan Zhang, Shujuan Li, et al. *Pediatrics.*

This is a multi-center cohort that assessed if early antibiotics exposure in preterm infants without infection was associated with adverse morbidities (BPD, ROP PVL, NEC, LOS) and late antibiotic use (<7 days of age). The study had a total of 21,540 infants, of whom 18,302 (85%) received early antibiotics. Early antibiotic was related to increased BPD, late antibiotic use, and late antibiotic use rate without a decrease in death or any morbidity. In addition, exposure to broad-spectrum antibiotics showed larger effect size on the outcomes than narrow-spectrum antibiotics. Therefore, judicious use of and antimicrobial stewardship on early antibiotics may improve neonatal outcomes and overall antibiotic use.

The metabolic and lipidomic profiling of the effects of tracheal occlusion in a rabbit model of congenital diaphragmatic hernia
Zachary E Easton, Timothy R H Regnault, Martina Mudri, et al. *J Pediatr Surg.*

Fetal tracheal occlusion (TO) reverses the pulmonary hypoplasia associated with congenital diaphragmatic hernia (CDH), but its mechanism of action remains poorly understood. CDH was created in fetal rabbits at 23 days, TO at 28 days and lung collection at 31 days (Term approximately 32 days). Lung-body weight ratio (LBWR) was significantly lower in CDH while CDH + TO was similar to controls (p = 0.003). Mean terminal bronchiole density (MTBD) was significantly higher in CDH fetuses and restored to control and sham levels in CDH + TO (p < 0.001). CONCLUSION: CDH + TO

reverses pulmonary hypoplasia in the CDH rabbit, in association with a specific metabolic and lipid signature.

MSC-EXO and tempol ameliorate bronchopulmonary dysplasia in newborn rats by activating HIF-1alpha
Juanmei Wang, Aimin Zhang, Furong Huang, et al. *Pediatr Pulmonol.*

This study investigates the effect of the combination of mesenchymal stem cells-derived exosomes (MSC-EXO) and tempol on BPD and analyzes its mechanism. The authors successfully extracted and identified MSC-EXO. In BPD rats, tidal volume, minute ventilation, peak inspiratory flow, and dynamic pulmonary compliance decreased, alveoli were simplified, and the number of interalveoli small vessels, blood vessel density decreased. Moreover, radical alveolar count, CD31, TAOC, and SOD decreased, and MLI, alpha-SMA, MDA, IL-1beta, IL-17, IL-6, and IFN-gamma increased, which was reversed by the combination of MSC-EXO and tempol treatment after combined treatment. Combined treatment could improve lung tissue injury, promote pulmonary vascular remodeling, restore lung function, and inhibit oxidative stress in BPD rats. These effects were achieved through activation of HIF-1alpha.

A randomized trial of an exclusive human milk diet in neonates with single ventricle Physiology
Cynthia L Blanco, Amy Hair, Lindsey B Justice, et al. *J Pediatr.*

This randomized controlled trial was conducted to determine whether weight gain velocity (g/kg/day) 30 days after the initiation of feeds after cardiac surgery and other clinical outcomes improve in infants with single ventricle physiology fed an exclusive human milk diet compared with a mixed human and bovine diet. Term neonates 7 days of age or younger with single ventricle physiology and anticipated cardiac surgical palliation within 30 days of birth were enrolled at 10 US centers. 107 neonates (exclusive human milk = 55, control = 52) were enrolled. The human milk group received human milk fortified once feeds reached 60ml/kg/day and control group received standard fortification with formula once enteral feeds reached 100ml/kg/day. The study results show the exclusive human milk showed improved growth (12 g/day [IQR, 5-18 g/day] vs 8 g/day [IQR, 0.4-14 g/day], respectively; P = .03). Necrotizing enterocolitis of all Bell stages was higher in the control group (15.4 % vs 3.6%, respectively; P = .04). Other major morbidities and length of hospital stay and mortality were similar between the groups.

Assessment of corticosteroid therapy and death or disability according to pretreatment risk of death or bronchopulmonary dysplasia in extremely preterm infants
Erik A Jensen, Laura Elizabeth Wiener, Matthew A Rysavy, et al. *JAMA Netw Open.*

Jensen and colleagues conducted this cohort study on 482 matched pairs of infants from 45 participating US hospitals in the NICHD Neonatal Research Network Generic Database to assess whether risk of death or neurodevelopmental disability associated with systemic corticosteroid vary according to the estimated pretreatment probability of death or grade 2 or 3 BPD in extremely preterm infants. Infants were included in the cohort if they were born at less than 27 weeks' gestation between April 1, 2011, and March 31, 2017; survived the first 7 postnatal days; and had 2-year death or developmental follow-up data collected between January 2013 and December 2019. The risk of death or disability associated with corticosteroid therapy was inversely associated with the estimated pretreatment probability of death or grade 2 or 3 BPD. This risk transitioned from estimated net harm to benefit when the pretreatment risk of death or grade 2 or 3 BPD exceeded 53% (95% CI, 44%-61%).

OTHER NOTEWORTHY PUBLICATIONS – May, 2023

COVID-19

Clinical characteristics and outcomes of SARS-CoV-2 positive neonates born to persons with SARS-CoV-2 infection in pregnancy in Los Angeles County, California, May 22, 2020–February 22, 2021
https://pubmed.ncbi.nlm.nih.gov/36795577/
Nirmatrelvir–Ritonavir (Paxlovid) for mild coronavirus disease 2019 (COVID-19) in pregnancy and lactation
https://pubmed.ncbi.nlm.nih.gov/36928334/
Sars-Cov-2 exposure from health care workers to infants: effects and outcomes
https://www.ncbi.nlm.nih.gov/pubmed/34450672
Adverse effects of COVID-19 pandemic on a multicenter randomized controlled trial
https://pubmed.ncbi.nlm.nih.gov/36581761/
Developmental screening of full-term infants at 16 to 18 months of age after in-utero exposure to maternal SARS-CoV-2 infection
https://pubmed.ncbi.nlm.nih.gov/36932135/
Comparing maternal substance use and perinatal outcomes before and during the COVID-19 pandemic
https://pubmed.ncbi.nlm.nih.gov/36746986/

Pediatrics
Early antibiotic use and neonatal outcomes among preterm infants without infections
https://pubmed.ncbi.nlm.nih.gov/37042203/
Respiratory outcomes for ventilator-dependent children with bronchopulmonary dysplasia
https://pubmed.ncbi.nlm.nih.gov/37122061/
Real-time intubation and ventilation feedback: a randomized controlled simulation study
https://pubmed.ncbi.nlm.nih.gov/37038898/

Journal of Pediatrics
Cost-effectiveness of newborn screening for phenylketonuria and congenital hypothyroidism
https://www.ncbi.nlm.nih.gov/pubmed/36495999
Healthcare costs of major morbidities associated with prematurity in US childrens hospitals
https://www.ncbi.nlm.nih.gov/pubmed/36509157
Evolution of ultrasound-assessed lung aeration and gas exchange in respiratory distress syndrome and transient tachypnea of the neonate
https://www.ncbi.nlm.nih.gov/pubmed/36493883
Association of postnatal growth changes and neurodevelopmental outcomes in preterm neonates of <29 weeks' gestation
https://www.ncbi.nlm.nih.gov/pubmed/36509160
Substance exposure and adverse neonatal outcomes: a population-based cohort study
https://www.ncbi.nlm.nih.gov/pubmed/36513212
Diagnostic performance and patient outcomes with c-reactive protein use in early-onset sepsis evaluations
https://www.ncbi.nlm.nih.gov/pubmed/36529283
A randomized trial of an exclusive human milk diet in neonates with single ventricle physiology
https://www.ncbi.nlm.nih.gov/pubmed/36528055

Pediatric Research
Sirolimus for diffuse intestinal infantile hemangioma with PHACE features: systematic review
https://pubmed.ncbi.nlm.nih.gov/36180586
Neurodevelopmental consequences of preterm punctate white matter lesions: a systematic review
https://pubmed.ncbi.nlm.nih.gov/36085366
Multisystem inflammatory syndrome in children (MIS-C) and neonates (MIS-N) associated with COVID-19: optimizing definition and management
https://pubmed.ncbi.nlm.nih.gov/36050390

In the developing cerebral cortex: axonogenesis, synapse formation, and synaptic plasticity are regulated by SATB2 target genes
https://pubmed.ncbi.nlm.nih.gov/36028553
Pilot dose-ranging of rhIGF-1/rhIGFBP-3 in a preterm lamb model of evolving bronchopulmonary dysplasia
https://pubmed.ncbi.nlm.nih.gov/36030318
A glucocorticoid-receptor agonist ameliorates bleomycin-induced alveolar simplification in newborn rats
https://pubmed.ncbi.nlm.nih.gov/36068343
Early molecular markers of ventilator-associated pneumonia in bronchoalveolar lavage in preterm infants
https://pubmed.ncbi.nlm.nih.gov/36071239
Infection of the murine placenta by Listeria monocytogenes induces sex-specific responses in the fetal brain
https://pubmed.ncbi.nlm.nih.gov/36127406
Perinatal exposure to UDCA prevents neonatal cholestasis in Cyp2c70-/- mice with human-like bile acids
https://pubmed.ncbi.nlm.nih.gov/36151295
Quantitative lung ultrasound detects dynamic changes in lung recruitment in the preterm lamb
https://pubmed.ncbi.nlm.nih.gov/36167816
Metabolomic profiling of intrauterine growth-restricted preterm infants: a matched case–control study
https://pubmed.ncbi.nlm.nih.gov/36085367
The association between BMI trajectories and bronchopulmonary dysplasia among very preterm infants
https://pubmed.ncbi.nlm.nih.gov/36414708
Characterization of SARS-CoV-2 antibodies in human milk from 21 women with confirmed COVID-19 infection
https://pubmed.ncbi.nlm.nih.gov/36434204
Neurodevelopmental correlates of caudate volume in children born at risk of neonatal hypoglycaemia
https://pubmed.ncbi.nlm.nih.gov/36513807
Neurometabolic changes in neonates with congenital heart defects and their relation to neurodevelopmental outcome
https://pubmed.ncbi.nlm.nih.gov/35995938
A mixed methods study of perceptions of bias among neonatal intensive care unit staff
https://pubmed.ncbi.nlm.nih.gov/36038641
Postnatal abnormality in brainstem neural conduction in neonatal bronchopulmonary dysplasia survivors
https://pubmed.ncbi.nlm.nih.gov/36042331
Cardiorespiratory measures shortly after extubation and extubation outcomes in extremely preterm infants
https://pubmed.ncbi.nlm.nih.gov/36057645
Thermoregulation and golden hour practices in extremely preterm infants: an international survey
https://pubmed.ncbi.nlm.nih.gov/36075989
Metabolomic and exposomic biomarkers of risk of future neurodevelopmental delay in human milk
https://pubmed.ncbi.nlm.nih.gov/36109618
Neurological examination at 32-weeks postmenstrual age predicts 12-month cognitive outcomes in very preterm-born infants
https://pubmed.ncbi.nlm.nih.gov/36151299
Practice variations for fetal and neonatal congenital heart disease within the Children’s Hospitals Neonatal Consortium
https://pubmed.ncbi.nlm.nih.gov/36167818
Caregiver-reported newborn term and preterm motor abilities: psychometrics of the PediaTracTM Motor domain
https://pubmed.ncbi.nlm.nih.gov/36180587
Prenatal and child vitamin D levels and allergy and asthma in childhood
https://pubmed.ncbi.nlm.nih.gov/36057646

Dynamic change, influencing factors, and clinical impact of cellular components in human breast milk
https://pubmed.ncbi.nlm.nih.gov/36151297
Outcomes of Babies with Opioid Exposure (OBOE): protocol of a prospective longitudinal cohort study
https://pubmed.ncbi.nlm.nih.gov/36042329

Archives of Disease in Childhood - Fetal & Neonatal Edition
Diversity and trends of human milk banking: a scoping review from 1946 to 2021
https://pubmed.ncbi.nlm.nih.gov/36207059/
Prophylactic surfactant nebulisation for the early aeration of the preterm lung: a randomised clinical trial
https://pubmed.ncbi.nlm.nih.gov/36424125/
Exposure to umbilical cord management approaches and death or neurodevelopmental impairment at 22–26 months' corrected age after extremely preterm birth
https://pubmed.ncbi.nlm.nih.gov/36253076/
Do newborn infants exhale through the CPAP system? Secondary analysis of a randomised cross-over trial
https://pubmed.ncbi.nlm.nih.gov/36261145/
Diaphragm electrical activity during weaning of nasal high-flow therapy in preterm infants
https://pubmed.ncbi.nlm.nih.gov/36223982/
Nasal high-flow therapy to optimise stability during intubation: the NOSI pilot trial
https://pubmed.ncbi.nlm.nih.gov/36307187/
Predicting the likelihood of lower respiratory tract Ureaplasma infection in preterms
https://pubmed.ncbi.nlm.nih.gov/36261143/
Mortality and neurodevelopmental outcomes of infants with spontaneous intestinal perforation: a systematic review and meta-analysis
https://pubmed.ncbi.nlm.nih.gov/36328412/
Changes in the growth of very preterm infants in England 2006–2018
https://pubmed.ncbi.nlm.nih.gov/36307188/
Mechanisms affecting the gut of preterm infants in enteral feeding trials: a nested cohort within a randomised controlled trial of lactoferrin
https://pubmed.ncbi.nlm.nih.gov/36396443/
Effect of clinical chorioamnionitis on breathing effort in premature infants at birth: a retrospective case–control study
https://pubmed.ncbi.nlm.nih.gov/36418158/
Grade 3 school performance among children born preterm: a population-based cohort study
https://pubmed.ncbi.nlm.nih.gov/36456174/
Outcome at early school age and adolescence after hypothermia-treated hypoxic–ischaemic encephalopathy: an observational, population-based study
https://pubmed.ncbi.nlm.nih.gov/36600485/
Targeted screening for congenital cytomegalovirus infection: clinical, audiological and neuroimaging findings
https://pubmed.ncbi.nlm.nih.gov/36549893/
Continuous glucose monitoring during therapeutic hypothermia for hypoxic ischaemic encephalopathy: a feasibility study
https://pubmed.ncbi.nlm.nih.gov/36600516/
Dexmedetomidine affects cerebral activity in preterm infants
https://pubmed.ncbi.nlm.nih.gov/35288449/
Letter: Lactate acidosis and hypoglycaemia in twin anaemia polycythemia sequence donors
https://pubmed.ncbi.nlm.nih.gov/35788032/
Letter: Reliability of respiratory function monitor interpretation for neonatal resuscitation
https://pubmed.ncbi.nlm.nih.gov/35835540/
Unusual skin and eyelid changes in a neonate with pseudohypoaldosteronism
https://pubmed.ncbi.nlm.nih.gov/34911729/

Extreme preterm neonate with fetal warfarin syndrome
https://pubmed.ncbi.nlm.nih.gov/34949636/
Resuscitation of a preterm infant with massive air embolism
https://pubmed.ncbi.nlm.nih.gov/37277170/

Journal of Perinatology
Use of human milk and fortification in the NICU
https://pubmed.ncbi.nlm.nih.gov/36257977/
Intracranial ultrasound abnormalities and mortality in preterm infants with and without fetal growth restriction stratified by fetal Doppler study results
https://pubmed.ncbi.nlm.nih.gov/36717608/
Placental pathology associated with lenticulostriate vasculopathy (LSV) in preterm infants
https://pubmed.ncbi.nlm.nih.gov/36376451/
Neonatal subgaleal hemorrhage: twenty years of trends in incidence, associations, and outcomes
https://pubmed.ncbi.nlm.nih.gov/36307481/
Prevalence of perinatal factors in infants with brachial plexus birth injuries and their association with injury severity
https://pubmed.ncbi.nlm.nih.gov/36585508/
Correlation of clinical pain scores with cerebral oxygenation in preterm neonates during acute painful procedures: a prospective observational study
https://pubmed.ncbi.nlm.nih.gov/36271296/
Effect of whole body massage on pain scores of neonates during venous puncture and comparison with oral dextrose and Kangaroo care, a randomized controlled evaluator-blind clinical study
https://pubmed.ncbi.nlm.nih.gov/36450853/
COMFORTneo scale: a reliable and valid instrument to measure prolonged pain in neonates?
https://pubmed.ncbi.nlm.nih.gov/36746985/
A randomized controlled trial of oropharyngeal therapy with mother's own milk for premature infants
https://pubmed.ncbi.nlm.nih.gov/36596945/
Growth after implementing a donor breast milk program in neonates <33 weeks gestational age or birthweight <1500 grams: Retrospective cohort study
https://pubmed.ncbi.nlm.nih.gov/36737571/
Leveraging mHealth and a milk expression frequency biomarker during postpartum to prolong lactation among parents of critically ill infants: a pilot study
https://pubmed.ncbi.nlm.nih.gov/36882532/
Human milk-derived fortifiers are linked with feed extension due to Hypoglycemia in infants <1250 g or <30 weeks: a matched retrospective chart review
https://pubmed.ncbi.nlm.nih.gov/36991141/
Early pumping frequency and coming to volume for mother's own milk feeding in hospitalized infants
https://pubmed.ncbi.nlm.nih.gov/37037987/
Effects of prophylactic probiotics supplementation on infants born very preterm or very low birth weight
https://pubmed.ncbi.nlm.nih.gov/36997802/
Tibial quantitative ultrasound compared to dual-energy X-ray absorptiometry in preterm infants
https://pubmed.ncbi.nlm.nih.gov/36587053/
Enteral tube feeding selection at NICU discharge and resource utilization
https://pubmed.ncbi.nlm.nih.gov/36435925/

Neonatology
No new content

American Journal of Perinatology
Modifiable factors and delays associated with neonatal deaths and stillbirths in Jordan: findings from facility-based neonatal death and stillbirth audits
https://www.ncbi.nlm.nih.gov/pubmed/34058760

Neonatal outcomes of infants born to women on hemodialysis: a single-center, case-control study
https://www.ncbi.nlm.nih.gov/pubmed/34058762
Neonatal lymphopenia screening is important for early diagnosis of severe combined immunodeficiency
https://www.ncbi.nlm.nih.gov/pubmed/34116583
Fathers' heightened stress responses to recounting their NICU experiences months after discharge: a mixed methods pilot study
https://www.ncbi.nlm.nih.gov/pubmed/34130316
Cue-based feeding as intervention to achieve full oral feeding in preterm infants primarily managed with bubble CPAP
https://www.ncbi.nlm.nih.gov/pubmed/34130317
A questionnaire assessing utilization of delayed cord clamping
https://www.ncbi.nlm.nih.gov/pubmed/34144627
Differences in postmortem investigation following perinatal death
https://www.ncbi.nlm.nih.gov/pubmed/34126647
Transcutaneous bilirubin monitoring in preterm infants of 23 to 34 weeks gestation
https://www.ncbi.nlm.nih.gov/pubmed/34126648
Can Mozart improve weight gain and development of feeding skills in premature infants? A randomized trial
https://www.ncbi.nlm.nih.gov/pubmed/34157772

Journal of Neonatal-Perinatal Medicine
Assessing risks at 22–24 weeks gestation
https://pubmed.ncbi.nlm.nih.gov/36565069/

Maternal Health, Neonatology and Perinatology
No relevant articles

Neoreviews
Providing optimal nutrition to very low birthweight infants in the NICU
https://pubmed.ncbi.nlm.nih.gov/37122057/
Prenatal diagnosis, management, and treatment of fetal cardiac disease
https://pubmed.ncbi.nlm.nih.gov/37122058/
Does preterm status hinder the timely diagnosis of intestinal atresia?
https://pubmed.ncbi.nlm.nih.gov/37122053/
An infant with hypotonia and respiratory distress
https://pubmed.ncbi.nlm.nih.gov/37122059/
Newborn with a sudden increase in head circumference, wide sutures, and open fontanels
https://pubmed.ncbi.nlm.nih.gov/37122056/
Neonate with hypoglycemia and persistent jaundice
https://pubmed.ncbi.nlm.nih.gov/37122052/
A necessary iatrogenic preterm delivery: neonatal implications of antiphospholipid syndrome
https://pubmed.ncbi.nlm.nih.gov/37122054/
A term infant with respiratory distress after feeding
https://pubmed.ncbi.nlm.nih.gov/37122055/
A neonate with distinct eye movements
https://pubmed.ncbi.nlm.nih.gov/37122060/

JAMA Pediatrics
Diagnostic accuracy of portable, handheld point-of-care tests vs laboratory-based bilirubin quantification in neonates. a systematic review and meta-analysis
https://www.ncbi.nlm.nih.gov/pubmed/36912856

BMC Pediatrics

Survival of children with trisomy 18 associated with the presence of congenital heart disease and intervention in the Republic of Korea
https://pubmed.ncbi.nlm.nih.gov/37210512

Irrational prescription and its costs in neonatal surfactant therapy: public and private hospitals of Iran in 2018
https://pubmed.ncbi.nlm.nih.gov/37210481

Analysis of risk factors for parenteral nutrition-associated cholestasis in preterm infants: a multicenter observational study
https://pubmed.ncbi.nlm.nih.gov/37210514

Vitamin D supplementation improved physical growth and neurologic development of preterm infants receiving nesting care in the neonatal intensive care unit
https://pubmed.ncbi.nlm.nih.gov/37210477

Radial nerve palsy caused by a rapidly growing intramuscular hematoma in an infant with biliary atresia: a case report
https://pubmed.ncbi.nlm.nih.gov/37208637

Qualitative assessment of infant sleep practices and other risk factors of sudden infant death syndrome (SIDS) among mothers in Lusaka, Zambia
https://pubmed.ncbi.nlm.nih.gov/37202764

Prevention of human milk-acquired cytomegalovirus infection in very-low-birth-weight infants
https://pubmed.ncbi.nlm.nih.gov/37202724

Early resection of a rare congenital pulmonary airway malformation causing severe progressive respiratory distress in a preterm neonate: a case report and review of the literature
https://pubmed.ncbi.nlm.nih.gov/37173730

Implementing an exclusive human milk diet for preterm infants: real-world experience in diverse NICUs
https://pubmed.ncbi.nlm.nih.gov/37173652

Clinical characteristics of patients with prenatal hydronephrosis in early postnatal period: a single center retrospective study
https://pubmed.ncbi.nlm.nih.gov/37173710

Changes in birth outcomes and utilization of prenatal care during the COVID-19 pandemic in 2020: a secondary analysis of vital statistics in Colombia
https://pubmed.ncbi.nlm.nih.gov/37173676

Effect of the change of mechanical ventilation mode on cerebral oxygen saturation level in neonates
https://pubmed.ncbi.nlm.nih.gov/37165309

Geographical disparities and determinants of infant mortality in Ethiopia: mapping and spatial analysis using EDHS data
https://pubmed.ncbi.nlm.nih.gov/37147651

Neonatal mortality in small for gestational age infants based on reference local newborn curve at secondary and tertiary hospitals in Indonesia
https://pubmed.ncbi.nlm.nih.gov/37147583

CPAP failure in the management of preterm neonates with respiratory distress syndrome where surfactant is scarce. A prospective observational study
https://pubmed.ncbi.nlm.nih.gov/37138252

The H-HOPE behavioral intervention plus Kangaroo Mother Care increases mother-preterm infant responsivity in Malawi: a prospective cohort comparison
https://pubmed.ncbi.nlm.nih.gov/37085764

Pediatric Critical Care Medicine

Extracorporeal membrane oxygenation for neonates with congenital diaphragmatic hernia: prevalence of seizures and outcomes
https://pubmed.ncbi.nlm.nih.gov/37140337

New England Journal of Medicine

Blinatumomab added to chemotherapy in infant lymphoblastic leukemia
https://pubmed.ncbi.nlm.nih.gov/37099340/
Advances in artificial intelligence for infectious-disease surveillance
https://pubmed.ncbi.nlm.nih.gov/37099342/
Neonatal seizures
https://pubmed.ncbi.nlm.nih.gov/37133587/
Expectant management or early ibuprofen for patent ductus arteriosus
https://pubmed.ncbi.nlm.nih.gov/37195958/
The current and future state of AI interpretation of medical images
https://pubmed.ncbi.nlm.nih.gov/37224199/

Lancet

Efficacy of maternal vitamin B12 supplementation for improving infant outcomes in settings with high deficiency
https://pubmed.ncbi.nlm.nih.gov/37031692/
The effect of vitamin B12 supplementation during pregnancy on infant growth and development in Nepal: a community-based, double-blind, randomised, placebo-controlled trial
https://pubmed.ncbi.nlm.nih.gov/37031691/
The link between respiratory syncytial virus infection during infancy and asthma during childhood
https://pubmed.ncbi.nlm.nih.gov/37086746/
The ethical, economic, and developmental imperative to prevent small vulnerable newborns and stillbirths: essential actions to improve the country and global response
https://pubmed.ncbi.nlm.nih.gov/37167987/
Respiratory syncytial virus infection during infancy and asthma during childhood in the USA (INSPIRE): a population-based, prospective birth cohort study
https://pubmed.ncbi.nlm.nih.gov/37086744/
Small vulnerable newborns—big potential for impact
https://pubmed.ncbi.nlm.nih.gov/37167991/
Small babies, big risks: global estimates of prevalence and mortality for vulnerable newborns to accelerate change and improve counting
https://pubmed.ncbi.nlm.nih.gov/37167989/
Biological and pathological mechanisms leading to the birth of a small vulnerable newborn
https://pubmed.ncbi.nlm.nih.gov/37167990/
Evidence-based antenatal interventions to reduce the incidence of small vulnerable newborns and their associated poor outcomes
https://pubmed.ncbi.nlm.nih.gov/37167988/
WHO Global Position Paper and Implementation Strategy on kangaroo mother care call for fundamental reorganisation of maternal–infant care
https://pubmed.ncbi.nlm.nih.gov/37207686/

JAMA

Trends in buprenorphine initiation and retention in the United States, 2016-2022
https://pubmed.ncbi.nlm.nih.gov/37097363/
Harnessing the promise of artificial intelligence responsibly
https://pubmed.ncbi.nlm.nih.gov/36972068/
AI-generated medical advice—GPT and beyond
https://pubmed.ncbi.nlm.nih.gov/36972070/
It takes an average of 17 years for evidence to change practice—the burgeoning field of implementation science seeks to speed things up
https://pubmed.ncbi.nlm.nih.gov/37018006/
Prednisone vs placebo and live birth in patients with recurrent implantation failure undergoing in vitro fertilization: a randomized clinical trial

https://pubmed.ncbi.nlm.nih.gov/37129654/
FDA revokes approval for preterm birth drug makena
https://pubmed.ncbi.nlm.nih.gov/37043247/
RSV infection might be resuming prepandemic patterns
https://pubmed.ncbi.nlm.nih.gov/37075232/
The economic burden of racial, ethnic, and educational health inequities in the US
https://pubmed.ncbi.nlm.nih.gov/37191700/
RSV infection during infancy tied to asthma later
https://pubmed.ncbi.nlm.nih.gov/37133889/

BMJ
Delivering quality care to all mothers and newborns requires governments to engage the private sector
https://pubmed.ncbi.nlm.nih.gov/37147005/
Maternal RSV vaccine: Further analysis is urged on preterm births
https://pubmed.ncbi.nlm.nih.gov/37164373/
Diabetes: Missed routine checks are causing premature deaths in England, charity warns
https://pubmed.ncbi.nlm.nih.gov/37164372/
UN warns of preterm birth rates flatlining in every region
https://pubmed.ncbi.nlm.nih.gov/37164376/

Pediatric Infectious Disease Journal
Highly active antiretroviral therapy in an extremely low birth weight newborn with in utero transmission of HIV
https://pubmed.ncbi.nlm.nih.gov/36795550/
Neonatal Group B Streptococcal infection in Australia: A case–control study
https://pubmed.ncbi.nlm.nih.gov/36929884/
Disseminated neonatal monkeypox virus Infection: Case report in Brazil
https://pubmed.ncbi.nlm.nih.gov/36795540/
Congenital syphilis: Controversies and questions: A Global Perspective
https://pubmed.ncbi.nlm.nih.gov/36728111/
Congenital Zika Virus Syndrome and Autoimmunity: Two case reports of type 1 diabetes mellitus
https://pubmed.ncbi.nlm.nih.gov/36795588/

Pediatric Cardiology
No relevant articles

Pediatric Neurology
Neonatal hypertonia and progressive respiratory failure due to novel heterozygous mutation in ATAD1
https://www.ncbi.nlm.nih.gov/pubmed/36933275

Obstetrics and Gynecology
Mpox (Monkeypox) infection during pregnancy
https://pubmed.ncbi.nlm.nih.gov/36928418/

American Journal of Obstetrics & Gynecology
Criteria for placental examination for obstetrical and neonatal providers
https://pubmed.ncbi.nlm.nih.gov/36549567
Copy number variants and fetal growth in stillbirths
https://pubmed.ncbi.nlm.nih.gov/36356697
Fetal heart rate evolution and brain imaging findings in preterm infants with severe cerebral palsy
https://pubmed.ncbi.nlm.nih.gov/36370872

Reductions in stillbirths and preterm birth in COVID-19–vaccinated women: a multicenter cohort study of vaccination uptake and perinatal outcomes
https://pubmed.ncbi.nlm.nih.gov/36336084
Risks and pregnancy outcome after fetal reduction in dichorionic twin pregnancies: a Danish national retrospective cohort study
https://pubmed.ncbi.nlm.nih.gov/36441092

Hospital Pediatrics
Characterization of birth hospitalizations in the United States
https://pubmed.ncbi.nlm.nih.gov/37013702
A quality improvement project to reduce antibiotic exposure in premature neonates
https://pubmed.ncbi.nlm.nih.gov/37017004

BASIC SCIENCE SELECTIONS
The metabolic and lipidomic profiling of the effects of tracheal occlusion in a rabbit model of congenital diaphragmatic hernia
https://www.ncbi.nlm.nih.gov/pubmed/36801071
A Tracheal Aspirate-derived Airway Basal Cell Model Reveals a Proinflammatory Epithelial Defect in Congenital Diaphragmatic Hernia
Single-cell atlas of the human neonatal small intestine affected by necrotizing enterocolitis
https://www.ncbi.nlm.nih.gov/pubmed/37205711
Dedifferentiated fat cells administration ameliorates abnormal expressions of fatty acids metabolism-related protein expressions and intestinal tissue damage in experimental necrotizing enterocolitis
https://www.ncbi.nlm.nih.gov/pubmed/37217485
Rad1 attenuates DNA double-strand breaks and cell cycle arrest in type II alveolar epithelial cells of rats with bronchopulmonary dysplasia
https://www.ncbi.nlm.nih.gov/pubmed/37226090
MSC-EXO and tempol ameliorate bronchopulmonary dysplasia in newborn rats by activating HIF-1alpha
https://www.ncbi.nlm.nih.gov/pubmed/36650825
The protective effects of glutamine against bronchopulmonary dysplasia are associated with MKP-1/MAPK/cPLA2 signaling mediated NF-kappaB pathway
https://www.ncbi.nlm.nih.gov/pubmed/37098740

ADDITIONAL JOURNAL SELECTIONS
Preventing severe necrotizing enterocolitis: Propensity score analysis of interventions associated with surgical NEC or NEC-associated death
https://www.ncbi.nlm.nih.gov/pubmed/36805136
Lung Transplantation for Bronchopulmonary Dysplasia
https://www.ncbi.nlm.nih.gov/pubmed/36610665
Extracorporeal Membrane Oxygenation for Neonates With Congenital Diaphragmatic Hernia: Prevalence of Seizures and Outcomes
https://www.ncbi.nlm.nih.gov/pubmed/37140337
Respiratory physiology during NAVA ventilation in neonates born with a congenital diaphragmatic hernia: The "NAVA-diaph" pilot study
https://www.ncbi.nlm.nih.gov/pubmed/36807570
Prophylactic surfactant nebulisation for the early aeration of the preterm lung: a randomised clinical trial
https://www.ncbi.nlm.nih.gov/pubmed/36424125
Assessment of Corticosteroid Therapy and Death or Disability According to Pretreatment Risk of Death or Bronchopulmonary Dysplasia in Extremely Preterm Infants

https://www.ncbi.nlm.nih.gov/pubmed/37155165
The association between BMI trajectories and bronchopulmonary dysplasia among very preterm infants
https://www.ncbi.nlm.nih.gov/pubmed/36414708
Neonatal outcomes of congenital diaphragmatic hernia in full term versus early term deliveries: A systematic review and meta-analysis
https://www.ncbi.nlm.nih.gov/pubmed/37127552
Citicoline in hypoxic ischemic encephalopathy in neonates: a randomized controlled trial
https://www.ncbi.nlm.nih.gov/pubmed/37173784
Platelet parameters as biomarker for bronchopulmonary dysplasia in very low birth weight neonates in the first two weeks of life
https://www.ncbi.nlm.nih.gov/pubmed/37155211
Fetal and neonatal alloimmune thrombocytopenia: Current pathophysiological insights and perspectives for future diagnostics and treatment
https://www.ncbi.nlm.nih.gov/pubmed/36581513
Mixed Feedings and Necrotizing Enterocolitis: The Proportion of Human Milk Matters
https://www.ncbi.nlm.nih.gov/pubmed/37184535