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Section on Neonatal-Perinatal Medicine

ARTICLES OF INTEREST – June 2025

Melatonin activates KEAP1/NRF2/PTGS2 pathway to attenuate hyperoxia-driven ferroptosis in bronchopulmonary dysplasia
Xianhui Deng, Anni Xie, Danni Ye, et al. J Inflamm Res

This study aimed to test the hypothesis that melatonin mitigates hyperoxia-induced BPD by inhibiting ferroptosis in alveolar epithelial cells, specifically through modulation of the KEAP1/NRF2/PTGS2 signaling pathway. Melatonin (MT) treatment up-regulated the expression of glutathione peroxidase 4 (GPX4) and xCT in hyperoxia-treated alveolar epithelial cells. The anti-ferroptosis effect of MT on these cells was significantly reduced by ML385, confirming the role of the KEAP1/NRF2 pathway in MT's mechanism of action. In vivo experiments demonstrated that MT up-regulated NRF2, GPX4, and xCT levels and down-regulated KEAP1 and PTGS2 levels in hyperoxia-induced BPD models. Melatonin exerts a protective effect against hyperoxia-induced BPD by inhibiting ferroptosis in alveolar epithelial cells, and this effect is mediated, at least in part, through the KEAP1/NRF2/PTGS2 axis.

Activin A exacerbates neonatal necrotizing enterocolitis via ALK4-mediated apoptosis and barrier disruption
Wenjing Ma, Jiali Xie, Lu Liu, et al. Int Immunopharmacol

Activin A expression was significantly upregulated in intestinal tissues of NEC mice. Exogenous rActivin A worsened NEC outcomes, including weight loss, mortality, histopathological damage, and reduced tight junction proteins (ZO-1, Occludin, Claudin-1). This was accompanied by increased pro-inflammatory cytokines (IL-1beta, IL-6) and

epithelial apoptosis (Bax/Cleaved caspase-9 upregulation). Conversely, anti-Activin A reversed these effects. In vitro, Activin A enhanced LPS-induced IEC-6 apoptosis, which was abrogated by ALK4 inhibition. Mechanistically, Activin A activated Smad2/3 phosphorylation in an ALK4-dependent manner, without affecting NF-kappaB, ERK, or AKT pathways. Activin A drives NEC progression through ALK4-Smad2/3-mediated apoptosis and barrier disruption. Targeting the Activin A-ALK4 axis may offer novel therapeutic strategies for NEC.

Enhanced placental antibody transfer efficiency with longer interval between maternal respiratory syncytial virus vaccination and birth
Olyvia J Jasset, Paola Andrea Lopez Zapana, Zeynep Bahadir, et al. Am J Obstet Gynecol

In 2023, maternal bivalent RSV vaccination was approved to protect neonates and infants – administration period between 32 0/7 to 36 6/7 weeks' gestation. This study assesses the transfer of antibodies from mother to fetus by measuring maternal antibodies in the umbilical cord at delivery and in peripheral blood of infant at 2 months of age. The study also compared RSV antibody levels of vaccination versus natural infection. Maternal RSV vaccination resulted in significantly higher maternal and cord anti-RSV F antibody levels than natural infection (P<0.0001). Maternal vaccination >5 weeks prior to delivery had significantly higher cord:maternal transfer ratio compared to maternal vaccination 2-4 weeks prior to delivery. These results will help inform counseling expectant mothers and possibly NICU parents who plan to have more children on optimal RSV vaccination timing.

A trial of trimethoprim–sulfamethoxazole in pregnancy to improve birth outcomes
Bernard Chasekwa, Fortunate Munhanzi, Lenin Madhuyu, et al. N Engl J Med

A double-blind, randomized, placebo-controlled trial conducted in Zimbabwe investigated whether daily trimethoprim-sulfamethoxazole prophylaxis during pregnancy could improve infant birth weight. The study enrolled 993 pregnant women, including 131 with HIV infection, who received either the prophylactic treatment or a placebo from at least 14 weeks' gestation until delivery. The results showed no statistically significant difference in mean birth weight between the groups, with the trimethoprim-sulfamethoxazole group having a mean birth weight of 3040±460 g and the placebo group 3019±526 g, resulting in a mean difference of 20 g (95% CI, -43 to 83; P=0.53).

Risk factor effects on neurodevelopment at 2 years in very preterm children: a systematic review
Samuel B Axford, Alice C Burnett, Abdulbasit M Seid, et al. Pediatrics

The authors aimed to systematically review the effects of various risk factors on neurodevelopmental impairment (NDI) at 18 to 36 months of age in children born before 32 weeks' gestation. Brain injury (intraventricular hemorrhage grade III or IV and/or periventricular leukomalacia) had the highest adjusted odds of moderate-to-severe NDI and its main contributors (moderate-to-severe cognitive or language delay and moderate-to-severe cerebral palsy), followed by neonatal seizures and retinopathy of prematurity (≥stage 3, "threshold disease" or "treated"). Small for gestational age exhibited inconsistent effects, whereas lower maternal age exhibited no effect on the outcomes included. This review illustrates the extent to which risk factors influence the odds of NDI in children born very preterm, finding neurologic morbidities confer the highest risk.

Machine learning for clinical decision support in the neonatal intensive care unit
Irina Prelipcean, Divya Chhabra, Colby L Day, et al. Neoreviews

The neonatal intensive care unit (NICU) is a data-rich environment that is an ideal setting for the implementation of machine learning (ML) and artificial intelligence (AI) in clinical decision support (CDS). Despite their potential, ML and AI applications are rarely used in clinical practice because of infrastructure and technical limitations. The authors review the technical requirements for data acquisition solutions, storage, and processing needed to handle the varied sources of data generated by hospitalized newborns. Additionally, they describe the challenges for integrating structured and unstructured data from electronic health records, bedside monitors, imaging, and other sources and consider the ethical and legal implications of using ML and AI for CDS. Finally, they emphasize that the study and application of ML and AI models in CDS requires rigorous research and quality improvement methodology.

Association between early postnatal hydrocortisone and retinopathy of prematurity in extremely preterm infants, neonatology
Mariya Petrishka-Lozenska, Aldina Pivodic, Anders Flisberg, et al. Neonatology.

This retrospective cohort study included infants born before 28 weeks GA. Infants born between September 2020-August 2022 were treated with low-dose IV hydrocortisone for prevention of BPD, and were compared to untreated controls, born September 2016-August 2020. Hydrocortisone was administered postnatally with a dose of 0.5 mg/kg twice daily for 7 days, followed by 0.5 mg/kg per day for 3 days. Of 245 preterm infants, 65 were treated with low-dose hydrocortisone and 180 were untreated controls. Incidence of ROP treatment was reduced in the hydrocortisone group 18.5% (12/65) versus controls 32.2%

(58/180), p = 0.038. After adjusting for GA, BW, sex, and parenteral nutrition ≥14 days, the reduced risk of ROP treatment after early hydrocortisone treatment persisted (OR: 0.31, 95% CI: 0.16-0.60, p = 0.0005). The authors concluded that early postnatal low-dose intravenous hydrocortisone used to prevent BPD may reduce the risk of ROP treatment among extremely preterm infants.

Use of macrogol to accelerate feeding advancement in extremely preterm infants, neonatology

Kirstin Barbara Faust, Mariia Lupatsii, Frederike Römer, et al. Neonatology

This study included two observational cohort studies: the multi-center German-Neonatal-Network (GNN) study comparing extremely preterm infants born in NICUs using macrogol in the first week of life in >30% of their infants as compared to the remaining units, and the single-center Immunoregulation-of-the-Newborn (IRoN) study including gut microbiome assessment of infants born before and after implementation of macrogol use in this NICU. In the GNN study cohort including 4,290 infants, advancement to full enteral feedings was significantly faster in macrogol-using NICUs compared to the remaining NICUs (median/IQR: 14/12 vs. 16/14 days, p = 0.001). Risk for short-term outcomes such as sepsis or abdominal complications was not elevated in units with regular use of macrogol. In the IRoN cohort (n = 68), macrogol treated infants had a shorter time to reach full enteral feeding (median/IQR: macrogol 12/6, control 16/6 days, p = 0.004). The author concluded that early off-label use of macrogol may support feeding advancement in highly vulnerable babies

Enhanced placental antibody transfer efficiency with longer interval between maternal respiratory syncytial virus vaccination and birth

Olyvia J Jasset, Paola Andrea Lopez Zapana, Zeynep Bahadir, et al. Am J Obstet Gynecol

In 2023, maternal bivalent RSV vaccination was approved to protect neonates and infants – administration period between 32 0/7 to 36 6/7 weeks' gestation. This study assesses the transfer of antibodies from mother to fetus by measuring maternal antibodies in the umbilical cord at delivery and in peripheral blood of infant at 2 months of age. The study also compared RSV antibody levels of vaccination versus natural infection. Maternal RSV vaccination resulted in significantly higher maternal and cord anti-RSV F antibody levels than natural infection (P<0.0001). Maternal vaccination >5 weeks prior to delivery had significantly higher cord:maternal transfer ratio compared to maternal vaccination 2-4 weeks prior to delivery. These results will help inform counseling expectant mothers and possibly NICU parents who plan to have more children on optimal RSV vaccination timing.

OTHER NOTEWORTHY PUBLICATIONS – June 2025

Pediatrics

Inflammatory markers and invasive bacterial infection in febrile infants with positive urinalyses
https://pubmed.ncbi.nlm.nih.gov/40341581/

Infant respiratory syncytial virus immunization coverage in the vaccine safety datalink: 2023–2024
https://pubmed.ncbi.nlm.nih.gov/40324788/

Consensus recommendations for sustainable and equitable neonatology staffing: a Delphi approach
https://pubmed.ncbi.nlm.nih.gov/40360176/

Barriers to administering maternal rsv vaccination and monoclonal antibodies
https://pubmed.ncbi.nlm.nih.gov/40324790/

Neonatal cardiac dilation and dysfunction: time to look in the genes
https://pubmed.ncbi.nlm.nih.gov/40425186/

Retropharyngeal abscess as a cause of bilateral brachial palsy in a neonate
https://pubmed.ncbi.nlm.nih.gov/40335068/

Postnatal cord blood sampling: clinical report
https://pubmed.ncbi.nlm.nih.gov/40419287/

Journal of Pediatrics

Associations of bronchopulmonary dysplasia and infection with school-age brain development in children born preterm
https://pubmed.ncbi.nlm.nih.gov/40023219/

Prediction of neurodevelopmental outcomes at 18 to 22 months using the numerical sarnat score compared with modified sarnat staging in infants with moderate to severe hypoxic-ischemic encephalopathy
https://pubmed.ncbi.nlm.nih.gov/39988119/

Neurobehavioral profiles in opioid-exposed and unexposed neonates
https://pubmed.ncbi.nlm.nih.gov/40057022/

The natural history of congenital hepatic hemangiomas
https://pubmed.ncbi.nlm.nih.gov/40023218/

Outpatient diuretic use and respiratory outcomes in children with bronchopulmonary dysplasia during the first three years of life
https://pubmed.ncbi.nlm.nih.gov/40057021/

The interaction of antenatal steroid timing and pre-eclampsia on respiratory outcomes among infants born preterm

https://pubmed.ncbi.nlm.nih.gov/40057023/
Neonatal neurobehavior predicts neonatal opioid withdrawal syndrome severity prior to treatment interventions
https://pubmed.ncbi.nlm.nih.gov/40081567/
Association of enteral feed type with neurodevelopmental and neonatal outcomes among infants born preterm
https://pubmed.ncbi.nlm.nih.gov/40089177/
Patent ductus arteriosus, hydrocortisone, and outcome among infants born extremely preterm: secondary analysis of the hydrocortisone trial
https://pubmed.ncbi.nlm.nih.gov/40090543/
Prematurity and congenial diaphragmatic hernia: revisiting outcomes in a contemporary cohort
https://pubmed.ncbi.nlm.nih.gov/40118245/
Effect of intermittent hypoxemia and hyperoxemia during the neonatal period on control of breathing function among infants born extremely preterm
https://pubmed.ncbi.nlm.nih.gov/40090544/

Pediatric Research
Pro-inflammatory biomarkers and long term neurological outcomes in hypothermia plus melatonin treated asphyxiated newborns. A preliminary approach
https://pubmed.ncbi.nlm.nih.gov/39580594/
Role of maternal milk in providing a healthy intestinal microbiome for the preterm neonate
https://pubmed.ncbi.nlm.nih.gov/39663425/
Neonatal multimorbidity and the phenotype of premature aging in preterm infants
https://pubmed.ncbi.nlm.nih.gov/39455859/
Effect of prenatal antibiotics on breast milk and neonatal IgA and microbiome: a case-control
https://pubmed.ncbi.nlm.nih.gov/39966546/
Impact of the Neonatal Resuscitation Video Review program for neonatal staff: a qualitative analysis
https://pubmed.ncbi.nlm.nih.gov/39367199/
The who, when, and why of pacifier use
https://pubmed.ncbi.nlm.nih.gov/39406952/
Utility of urinary NT-proBNP in congenital diaphragmatic hernia: a prospective pilot study
https://pubmed.ncbi.nlm.nih.gov/39415038/
Cardiac function at follow-up in infants treated with therapeutic hypothermia for neonatal hypoxic-ischemic encephalopathy
https://pubmed.ncbi.nlm.nih.gov/39482497/

Association between BNP and all-cause mortality in critically ill children: a cohort study
https://pubmed.ncbi.nlm.nih.gov/39443695/
Omic-signature of bronchopulmonary dysplasia associated pulmonary hypertension in <1500g-birth-weight-infants with hemodynamically significant intracardiac shunt
https://pubmed.ncbi.nlm.nih.gov/39271902/
Cardiovascular responses as predictors of mortality in children with acute brain injury
https://pubmed.ncbi.nlm.nih.gov/39548295/
Investigation of mothers' elicited infant-directed speech and singing for preterm infants
https://pubmed.ncbi.nlm.nih.gov/39415040/
The effects of nutrition on mesenteric oxygenation among neonates with neonatal encephalopathy: a randomized clinical trial
https://pubmed.ncbi.nlm.nih.gov/39427102/
Severe anemia in preterm infants associated with increased bacterial virulence potential and metabolic disequilibrium
https://pubmed.ncbi.nlm.nih.gov/39438713/
Predictive model development for premature infant extubation outcomes: development and analysis
https://pubmed.ncbi.nlm.nih.gov/39438711/
Kidney complications in children with bronchopulmonary dysplasia
https://pubmed.ncbi.nlm.nih.gov/39443697/
Bronchopulmonary dysplasia to predict neurodevelopmental impairment in infants born extremely preterm
https://pubmed.ncbi.nlm.nih.gov/39448816/
Bronchopulmonary dysplasia demonstrates dysregulated autotaxin/lysophosphatidic acid signaling in a neonatal mouse model
https://pubmed.ncbi.nlm.nih.gov/39415037/
Preterm birth is associated with dystonic features and reduced cortical parvalbumin immunoreactivity in mice
https://pubmed.ncbi.nlm.nih.gov/39433959/

Archives of Disease in Childhood - Fetal & Neonatal Edition

Pulmonary hypertension in preterm neonates with bronchopulmonary dysplasia: a meta-analysis
https://pubmed.ncbi.nlm.nih.gov/39603794
Pulmonary artery peak Doppler velocity as an estimator of systemic blood flow and predictor of intraventricular haemorrhage in preterm infants: a multicentre prognostic accuracy study
https://pubmed.ncbi.nlm.nih.gov/39643444

We should do better in accounting for multiple births in neonatal randomised trials: a methodological systematic review
https://pubmed.ncbi.nlm.nih.gov/39653500
Transition from neonatal to paediatric intensive care of very preterm-born children: a cohort study of children born between 2013 and 2018 in England and Wales
https://pubmed.ncbi.nlm.nih.gov/39653499
Reducing unplanned extubation in the neonatal intensive care unit: a quality improvement project
https://pubmed.ncbi.nlm.nih.gov/39667846
Postnatal betamethasone treatment in extremely preterm infants and risk of neurodevelopmental impairment: a cohort study
https://pubmed.ncbi.nlm.nih.gov/39694682
Trends in the survival of very preterm infants between 2011 and 2020 in France
https://pubmed.ncbi.nlm.nih.gov/39730194
Using a novel smartphone app to track noise and vibration exposure during neonatal ambulance transport
https://pubmed.ncbi.nlm.nih.gov/39762002
Birth weight and head circumference for 22–29 weeks gestation neonates from an international cohort
https://pubmed.ncbi.nlm.nih.gov/39762001
Balancing precision and affordability in assessing infant development in large-scale mortality trials: secondary analysis of a randomised controlled trial
https://pubmed.ncbi.nlm.nih.gov/39788720
Association of gestational day with antenatal management and the mortality and respiratory outcomes of extremely preterm infants
https://pubmed.ncbi.nlm.nih.gov/39819501
Red blood cell transfusions in neonatal intensive care units: a nationwide observational cohort study
https://pubmed.ncbi.nlm.nih.gov/39819500

Journal of Perinatology

Integrating parent voices into research at the extremes of prematurity: what are we doing and where should we go?
https://pubmed.ncbi.nlm.nih.gov/39548268
Supporting parents' emotional and mental health in the antenatal consultation
https://pubmed.ncbi.nlm.nih.gov/39462056
Uncertainties in the NICU: a scoping review to inform a tailored taxonomy
https://pubmed.ncbi.nlm.nih.gov/40240841

Mental health in pregnancy complicated by fetal anomaly: depression screening and referrals in a single fetal care center
https://pubmed.ncbi.nlm.nih.gov/39289556
Development of a checklist for evaluation of shared decision-making in consultation for extremely preterm delivery
https://pubmed.ncbi.nlm.nih.gov/39438609
Balancing survival and suffering: factors influencing parental decision making after periviable consultation
https://pubmed.ncbi.nlm.nih.gov/39521888
Maternal fetal medicine, obstetric, and neonatology perspectives on joint prenatal counseling at periviable gestational ages
https://pubmed.ncbi.nlm.nih.gov/40097573
Voices of parents of children with major congenital anomalies admitted to the NICU: initial diagnosis, hospitalization, and discharge home
https://pubmed.ncbi.nlm.nih.gov/40038541
Experiences of communication in the neonatal intensive care unit for mothers with a preferred language other than English
https://pubmed.ncbi.nlm.nih.gov/39979432
Piloting the better research interactions for every family (BRIEF) researcher intervention to support recruitment for a neonatal clinical trial: parent experience and infant enrollment
https://pubmed.ncbi.nlm.nih.gov/40038540
Are racial and ethnic disparities in brachial plexus birth injuries explained by known risk factors?
https://pubmed.ncbi.nlm.nih.gov/40089579
Family integrated care reduces stress in transferred parents of preterm infants, but not across all families: a stepped-wedge cluster-randomized trial
https://pubmed.ncbi.nlm.nih.gov/40394238
Interprofessional perspectives on non-invasive respiratory support practices in extremely preterm infants: a Canadian survey
https://pubmed.ncbi.nlm.nih.gov/40221609
Feasibility of volume targeted- positive pressure ventilation for preterm infants requiring invasive ventilation in the delivery room
https://pubmed.ncbi.nlm.nih.gov/40148582
Changes in lung aeration with high-flow nasal cannula compared to nasal CPAP in preterm infants
https://pubmed.ncbi.nlm.nih.gov/40122991
Comparison of efficacy between beractant and poractant alfa in respiratory distress syndrome among preterm infants (28–33+6 weeks gestational age) using the less invasive

surfactant administration (LISA) technique: A randomized controlled trial
https://pubmed.ncbi.nlm.nih.gov/38609483
Accuracy of lung ultrasound in predicting successful extubation in preterm infants born ≤ 25 weeks
https://pubmed.ncbi.nlm.nih.gov/39809972
Outcomes of spontaneous pneumothorax in neonates: treatments vs. expectant management
https://pubmed.ncbi.nlm.nih.gov/40089580
Factors associated with rates and durations of cord clamping practice compliance in preterm neonates of <33 weeks' gestation
https://pubmed.ncbi.nlm.nih.gov/40481256
Nurse and parent perspectives of a neonatal intensive care unit redesign from open-bay to single-family rooms
https://pubmed.ncbi.nlm.nih.gov/40610756
Implementation of perinatal mental health screening for parents of infants in a level IV neonatal intensive care unit: A quality improvement initiative
https://pubmed.ncbi.nlm.nih.gov/40335721
Does ventilatory assistance before umbilical cord clamping reduce the risk of early death or intraventricular hemorrhage in extremely preterm infants?
https://pubmed.ncbi.nlm.nih.gov/40057651

Neonatology

The prevalence of neonatal hypoglycemia in twins versus singletons following exposure to antenatal steroid therapy is comparable: a retrospective study in a single center
https://pubmed.ncbi.nlm.nih.gov/39761659
A new tool to assess patient-ventilator synchrony in preterm infants receiving non-invasive ventilation: a randomized crossover pilot study
https://pubmed.ncbi.nlm.nih.gov/39837293
Maternal and neonatal factors associated with delayed closure of ductus arteriosus in term-born neonates: insights from the Copenhagen baby heart cohort study
https://pubmed.ncbi.nlm.nih.gov/39938495
Caffeine therapy for apnea of prematurity: single-center study on dosing practices and perceived effectiveness
https://pubmed.ncbi.nlm.nih.gov/39681093
Third-trimester development of central autonomic network connectivity is altered in an extrauterine environment
https://pubmed.ncbi.nlm.nih.gov/39746339
Association between enteral protein intake and fat-free mass accretion in very preterm

infants
https://pubmed.ncbi.nlm.nih.gov/39746346
Association of early nutrition with bronchopulmonary dysplasia severity and magnetic resonance imaging lung characteristics in preterm infants
https://pubmed.ncbi.nlm.nih.gov/39842412
Association between early postnatal hydrocortisone and retinopathy of prematurity in extremely preterm infants
https://pubmed.ncbi.nlm.nih.gov/39837291
Validation of a new classification for severe bronchopulmonary dysplasia in extremely preterm infants: insights from a large Japanese cohort
https://pubmed.ncbi.nlm.nih.gov/39870062
Use of macrogol to accelerate feeding advancement in extremely preterm infants
https://pubmed.ncbi.nlm.nih.gov/39900010
ChatGPT-4o in risk-of-bias assessments in neonatology: a validity analysis
https://pubmed.ncbi.nlm.nih.gov/39999815
Electrical impedance tomography during the extubation phase in very preterm born infants
https://pubmed.ncbi.nlm.nih.gov/40031894
European reference network for inherited and congenital anomalies evidence-based guideline on surgical aspects of necrotizing enterocolitis in premature neonates
https://pubmed.ncbi.nlm.nih.gov/39925108

American Journal of Perinatology

Perinatal outcomes based on number of digital exams in patients with preterm prelabor rupture of membrane
https://pubmed.ncbi.nlm.nih.gov/39374906/
Cardiac troponin-I level at 24 hours of age in stable newborn infants born at ≥35 weeks of gestation
Impact of attempted mode of delivery on neonatal outcomes in nulliparous individuals according to body mass index
https://pubmed.ncbi.nlm.nih.gov/39454644/
Association of borderline fetal growth with progression with fetal growth restriction
https://pubmed.ncbi.nlm.nih.gov/39454645/
Trends in gabapentin use in neonatal intensive care units from 2005 to 2020
https://pubmed.ncbi.nlm.nih.gov/39586804/
Low apgar score and risk of neonatal mortality among infants with birth defects
https://pubmed.ncbi.nlm.nih.gov/39586802/
A survey of minimally invasive surfactant use in the United States
https://pubmed.ncbi.nlm.nih.gov/39586801/

Transplacental transport rates of anti-pertussis toxin–IgG and anti-filamentous hemagglutinin–IgG antibodies in newborns by week of birth
https://pubmed.ncbi.nlm.nih.gov/39612946/
In-hospital outcomes of neonates with hypoxic–ischemic encephalopathy receiving sedation–analgesia during therapeutic hypothermia
https://pubmed.ncbi.nlm.nih.gov/39586803/
Association between slow and rapid weight gain before 36 weeks of corrected age and 6-year-developmental quotient in infants born at <26 weeks of gestation
https://pubmed.ncbi.nlm.nih.gov/39631741/
Congenital colorectal conditions: caregiver perspectives of their experience in the neonatal intensive care unit
https://pubmed.ncbi.nlm.nih.gov/39510535/
CircTLK1 knockdown alleviates cell inflammation and apoptosis by regulating elavl1/nox4 axis in neonatal sepsis-induced lung injury in mice
https://pubmed.ncbi.nlm.nih.gov/39732142/

Journal of Neonatal-Perinatal Medicine
No new content

Maternal Health, Neonatology and Perinatology
Retention of knowledge and skills among midwives one year after completing helping babies breathe pre-service training in Ethiopia: a non-randomized quasi-experimental study
https://pubmed.ncbi.nlm.nih.gov/40452076/
Maternal and perinatal outcomes of Somali migrant women in comparison to host populations in the Global North: a systematic review and meta-analysis
https://pubmed.ncbi.nlm.nih.gov/40457329/
Racial differences in psychosocial resources and mental and physical health outcomes during pregnancy: a structural equation modeling approach
https://pubmed.ncbi.nlm.nih.gov/40457470/

Neoreviews
Neonatal choanal atresia and stenosis
https://pubmed.ncbi.nlm.nih.gov/40449923/
Neonatal visual impairment: etiologies, screening, and management
https://pubmed.ncbi.nlm.nih.gov/40449916/
Ex-utero intrapartum treatment: indications, considerations, and postnatal expectations
https://pubmed.ncbi.nlm.nih.gov/40449917/

Ophthalmic outcomes in preterm infants
https://pubmed.ncbi.nlm.nih.gov/40449914/
A term neonate with severe fetal brain ventriculomegaly
https://pubmed.ncbi.nlm.nih.gov/40449922/
A neonate with bleeding through the mouth and nose
https://pubmed.ncbi.nlm.nih.gov/40449918/
A hidden twist: unilateral blue scrotum in a very preterm infant in the delivery room
https://pubmed.ncbi.nlm.nih.gov/40449921/
Point-of-care ultrasonography-guided placement of a peripheral arterial line in a newborn
https://pubmed.ncbi.nlm.nih.gov/40449920/
Lack of parental visitation as a symptom, not a diagnosis: the impact of social drivers of health in the NICU
https://pubmed.ncbi.nlm.nih.gov/40449915/

JAMA Pediatrics

US neonatal mortality from perinatal causes
https://pubmed.ncbi.nlm.nih.gov/40549379/
Severe neonatal morbidity and all-cause and cause-specific mortality through infancy and late adolescence
https://pubmed.ncbi.nlm.nih.gov/40493844/
Data and analysis concerns in trial whole-body hypothermia for neonatal encephalopathy in preterm infants
https://pubmed.ncbi.nlm.nih.gov/40489092/
Data and analysis concerns in trial of whole-body hypothermia for neonatal encephalopathy in preterm infants
https://pubmed.ncbi.nlm.nih.gov/40489119/
Data and analysis concerns in trial of whole-body hypothermia for neonatal encephalopathy in preterm infants—reply
https://pubmed.ncbi.nlm.nih.gov/40489091/

BMC Pediatrics

Birth prevalence and associated factors of congenital anomalies among neonates born at a public hospital in Awi Zone, Northwestern Ethiopia: institutional based cross-sectional study https://pubmed.ncbi.nlm.nih.gov/40490722/
Prevalence of intraventricular hemorrhage and associated factors to in premature babies in selected teaching hospitals in Rwanda https://pubmed.ncbi.nlm.nih.gov/40481398/
Neonatal seizures in Uyo: the burden, etiological factors and outcome
https://pubmed.ncbi.nlm.nih.gov/40481417/

Is performing the Kasai portoenterostomy in the neonatal period associated with a better prognosis? A single-center, retrospective cohort study from China
https://pubmed.ncbi.nlm.nih.gov/40468207/
Association between the motor optimality score-revised and clinical variables of preterm infants https://pubmed.ncbi.nlm.nih.gov/40452032/

Pediatric Critical Care Medicine
No new articles

New England Journal of Medicine
A trial of trimethoprim–sulfamethoxazole in pregnancy to improve birth outcomes
https://pubmed.ncbi.nlm.nih.gov/40466066

Lancet
No relevant articles

JAMA
No relevant articles

BMJ
No relevant articles

Pediatric Infectious Disease Journal
Neonatal sepsis in low- and middle-income countries: where are we now?
https://pubmed.ncbi.nlm.nih.gov/40168607

Pediatric Cardiology
Establishing optimal control cohorts for phase 1 trials: retrospective analysis of clinical and biological outcomes in neonates and infants undergoing two-ventricle repair
https://pubmed.ncbi.nlm.nih.gov/38918239/

Pediatric Neurology
Difficult conversations in fetal-neonatal neurology: national survey of educational experiences and needs of child neurology residents
https://pubmed.ncbi.nlm.nih.gov/40262354/
Severity of germinal matrix-intraventricular hemorrhage impacts thalamic growth and neurodevelopmental outcomes in preterm infants: a longitudinal magnetic resonance study

https://pubmed.ncbi.nlm.nih.gov/40288051/

Obstetrics and Gynecology

No relevant articles

American Journal of Obstetrics & Gynecology

Enhanced placental antibody transfer efficiency with longer interval between maternal respiratory syncytial virus vaccination and birth
https://pubmed.ncbi.nlm.nih.gov/39515450/

Mapping genetic susceptibility to spontaneous preterm birth: analysis of Utah pedigrees to find inherited genetic factors
https://pubmed.ncbi.nlm.nih.gov/39647653/

Gestational age assessment by ultrasound cerebellar measurements in fetal and perinatal deaths https://pubmed.ncbi.nlm.nih.gov/39571773/

More than the passage of time: neonatal health and active labor duration, the mediating role of chorioamnionitis
https://pubmed.ncbi.nlm.nih.gov/39662864/

Maternal body mass index, maneuvers, and neonatal morbidity associated with shoulder dystocia https://pubmed.ncbi.nlm.nih.gov/39515446/

Assisted reproductive technology and the risk of birth defects mediated by multifetal pregnancy: evidence from the China Birth Cohort Study
https://pubmed.ncbi.nlm.nih.gov/39580010/

Hospital Pediatrics

Rural-urban disparities in mortality among us-born preterm infants
https://pubmed.ncbi.nlm.nih.gov/40355128/

Process improvement for family-centered congenital heart disease deliveries
https://pubmed.ncbi.nlm.nih.gov/40328453/

BASIC SCIENCE SELECTIONS

Melatonin activates KEAP1/NRF2/PTGS2 pathway to attenuate hyperoxia-driven ferroptosis in bronchopulmonary dysplasia
https://www.ncbi.nlm.nih.gov/pubmed/40524969

Polymorphonuclear myeloid-derived suppressor cells protect against hyperoxia-induced bronchopulmonary dysplasia in neonatal mice through suppression of excessive inflammatory response
https://www.ncbi.nlm.nih.gov/pubmed/40517558

Caspase-8-driven NLRP3 inflammasome activation exacerbates bronchopulmonary dysplasia by increasing the apoptosis and pyroptosis crosstalk of alveolar epithelial cells
https://www.ncbi.nlm.nih.gov/pubmed/40483833
Activin A exacerbates neonatal necrotizing enterocolitis via ALK4-mediated apoptosis and barrier disruption
https://www.ncbi.nlm.nih.gov/pubmed/40494204
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