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Section on Neonatal-Perinatal Medicine

ARTICLES OF INTEREST – December 2025

[Gestational weight gain and pregnancy outcomes after GLP-1 receptor agonist discontinuation](#)

Jacqueline Maya, Deepti Pant, Yiran Fu, et al. JAMA

This retrospective cohort study included women within a single academic health system who received a GLP-1RA (contraindicated in pregnancy) between 3 years before and 90 days after conception, and matched them with 3 unexposed pregnancies (448 exposed and 1344 unexposed). The GLP-1RA-exposed group had a higher risk of excess gestational weight gain (65% vs 49%; risk ratio [RR], 1.32; 95% CI, 1.19-1.47), greater mean birth weight percentile (58.4% vs 54.8%; difference, 3.6%; 95% CI, 0.2%-6.9%), and higher risk of preterm delivery (17% vs 13%; RR, 1.34; 95% CI, 1.06-1.69), gestational diabetes (20% vs 15%; RR, 1.30; 95% CI, 1.01-1.68), and hypertensive disorders of pregnancy (46% vs 36%; RR, 1.29; 95% CI, 1.12-1.49). The authors concluded prepregnancy or early pregnancy discontinuation of a GLP-1RA was associated with more gestational weight gain and a higher risk of preterm delivery, gestational diabetes, and hypertensive disorders of pregnancy.

[Once gestational diabetes, always gestational diabetes? Maternal and neonatal outcomes of pregnancies with gestational diabetes preceding nongestational diabetes pregnancy: a retrospective cohort study.](#)

Yael Shalev-Rosenthal, Eran Hadar, Adam Rosenthal, et al. Am J Obstet Gynecol

This retrospective cohort study divided 19,703 individuals with at least 2 consecutive births at a tertiary medical center into 3 groups: individuals with gestational diabetes mellitus in both pregnancies (group 1), individuals with gestational diabetes mellitus in the first pregnancy but not in the subsequent pregnancy (group 2), and individuals with no gestational diabetes mellitus in both pregnancies (group 3). Group 2 showed higher rates of macrosomia (odds ratio, 1.40 [95% confidence interval, 1.01-1.92]; P=.03), large for gestational age (odds ratio, 1.60 [95% confidence interval, 1.20-2.00]; P<.01), and preeclampsia (odds ratio, 2.35 [95% confidence interval, 1.32-4.15]; P<.01) than group 3. The rates of large for gestational age, macrosomia, and preeclampsia were similar between groups 1 and 2. The authors concluded that these findings suggest that these individuals with gestational diabetes mellitus in the first pregnancy but not in the subsequent pregnancy may have underlying insulin resistance and other, still occurring, risk factors, and their absence of a gestational diabetes mellitus diagnosis does not eliminate the risk of adverse outcomes.

Melatonin ameliorates bronchopulmonary dysplasia by modulating the NF-kappaB pathway via the gut microbiota-short-chain fatty acid axis

Yue Wang, Qing Zhang, Qiuyue Luo, et al. *Int Immunopharmacol*

This study aimed to elucidate the mechanism by which melatonin ameliorates bronchopulmonary dysplasia (BPD) via modulation of gut microbiota and its metabolite, short-chain fatty acids (SCFAs). The administration of melatonin led to a significant increase in the abundance of *Ligilactobacillus murinus* within the gut microbiota and enhanced the production of SCFAs. Melatonin ameliorates BPD by modulating the gut microbiota-SCFA metabolic axis, which in turn suppresses NF-kappaB pathway activation and pyroptosis in lung tissues via systemic circulation. This finding suggests a novel therapeutic strategy for the treatment of BPD.

18-hydroxyeicosapentaenoic acid (18-HEPE) attenuate experimental necrotizing Enterocolitis

Hiromu Miyake, Kathryn E Hopperton, Pekka Määttänen, et al. *Clin Nutr*

Maternal intake of omega-3 polyunsaturated fatty acids (PUFAs) has been reported as protective against inflammatory reactions in their offspring. The authors hypothesized that omega-3 fatty acids would prevent intestinal injury in an experimental model of NEC. Pro-inflammatory cytokines IL6 and TNFalpha were lower in pups of mothers fed fish oil, compared to those fed safflower oil. Comparable results were obtained in fat-1 transgenic pups. Elevated levels of 18-hydroxyeicosapentaenoic acid (18-HEPE) were

detected in the distal ilea of pups in both models, suggesting that this eicosapentaenoic acid metabolite could mediate the observed protection. In the absence of maternal omega-3 supplementation, exogenous administration of 18-HEPE in wild-type pups, protected against intestinal injury. Maternal omega-3 supplementation prevented NEC and 18-HEPE could serve as a candidate novel therapy for either the prevention or treatment of neonatal intestinal injury.

Sucrose or glucose compared to breast milk for pain control in preterm infants: a systematic review and meta-analysis

Shaneela Shahid, Jorge Acosta-Reyes and Ivan D Florez. *J Perinatol*

The aim of this systematic review/meta-analysis of randomized clinical trials (RCTs) was to determine the efficacy of sucrose or glucose (SG) in preterm infants requiring heel lancing and venipuncture compared to breast milk or expressed breast milk (BM/EBM) for pain control and crying duration. Six RCTs (525 infants) comparing sucrose (24%) or glucose (30%, 10%, 25%) with BM/EBM were included. There was no difference between the alternatives in pain reduction at 30 s post-procedure measured with the Premature Infant Pain Profile (PIPP/PIPP-R) scores (MD -0.95, 95% CI -2.43; 0.54, Low certainty evidence). SG reduced the crying duration (MD -6.88, 95%CI -11.42; -2.34, Moderate certainty evidence). There were no differences between SG and BM/EBM in heart rate change or adverse events. In conclusion, moderate certainty evidence suggests that SG may be superior to BM/EBM for reducing crying duration during heel lancing and venipuncture procedures, but not for reducing pain intensity measured with PIPP/PIPP-R.

Neurodevelopmental outcome in infants with neonatal encephalopathy receiving hydrocortisone during therapeutic hypothermia: follow-up of the extended-CORTISoL trial

Kata Kovacs, Eniko Szakmar, Marianna Dobi, et al. *J Perinatol*

The authors sought to investigate neurodevelopmental outcome after hydrocortisone (HC) supplementation in infants with neonatal encephalopathy (NE) and hypotension. Fifty-five infants with volume-resistant hypotension during hypothermia were enrolled between 2016 and 2020. Eligible patients were randomly assigned to receive 0.5 mg/kg HC every 6 h or placebo along with standard dopamine treatment. Composite adverse outcome was defined as death or neurodevelopmental impairment, ascertained using the Bayley-II test. At median 20 months of age, death, or severe neurodevelopmental impairment occurred in 40% in the HC group, compared to 18% in the placebo group ($p = 0.13$). Multiple logistic regression analysis showed that for every 1 mg/kg increase in cumulative HC dose, the

odds of adverse cognitive outcome increased by 16% (95% CI 1.01-1.37; $p = 0.04$). The composite outcomes were similar in the HC-treated and placebo groups, however cumulative HC dose was associated with adverse cognitive outcome in infants with NE and hypotension.

Probiotic receipt and neurodevelopmental outcomes of infants <29 weeks gestation: a cohort study

Prakesh S Shah, Nicole Bando, Seungwoo Lee, et al. *J Pediatr*

This is a multicenter retrospective study evaluating probiotic use in extremely preterm infant and neurodevelopmental/growth outcomes at 18–30 months corrected age. The primary outcome was significant neurodevelopmental impairment (sNDI), defined by severe Bayley-III deficits, cerebral palsy (GMFCS III–V), significant hearing loss, or bilateral visual impairment. In adjusted regression analyses, probiotic exposure was equivalent to no probiotics for sNDI, demonstrating no evidence of harm. In propensity score–matched analyses, probiotics were potentially superior - lower risk of sNDI compared with no probiotics. Growth outcomes were reassuring with slightly higher weight and head circumference in matched analyses among probiotic-exposed infants. Overall, probiotic administration in very preterm infants may confer modest neurodevelopmental benefits.

Association of prepregnancy obesity versus excessive gestational weight gain with adverse neonatal outcomes in the United States

Rodney A McLaren Jr, Deepa Rastogi, Shantanu Rastogi, et al. *Am J Perinatol*

A retrospective cohort study examining whether pre-pregnancy obesity (PPO) and/or weight gain (eGWG) is associated with adverse neonatal outcomes. Compared to mothers with normal BMI and normal weight gain, both PPO and eGWG were independently whether gestational weight gain was normal or excessive—was associated with increased NICU admission, lower 5-minute APGAR, and greater need for immediate assisted ventilation. These findings suggest that long-standing maternal obesity may have a greater impact on neonatal health than excess weight gain during pregnancy alone. Targeting pre-pregnancy weight optimization through preconception counseling may help reduce adverse neonatal outcomes.

Outcomes with cesarean delivery vs vaginal birth in extremely preterm breech singletons

Yanchen Wang, Pasqualina Santaguida, Sameer Parpia, et al. Am J Obstet Gynecol

This population-based cohort study evaluated outcomes for 3,332 live-born, extremely preterm breech singletons between 23 and 27 weeks of gestation. The research found that cesarean delivery was associated with a significantly lower incidence of the primary composite outcome—death, severe neurological complications, or birth trauma—compared to vaginal birth (26.1% vs. 33.7%), representing an adjusted relative risk (aRR) of 0.77 (95% CI, 0.63–0.95). Data regarding gestational age showed that survival and morbidity risks were highly sensitive to timing: while overall survival has increased over the last decade, neonates born at 23–24 weeks remained at substantially higher risk, with a previous national database study cited in the context noting survival rates as low as 15.4% for those under 24 weeks compared to 71.6% for those at 24 weeks. The study concludes that for extremely preterm breech infants, cesarean delivery may offer protective benefits, though the risk of severe morbidity remains high at the lowest gestational ages. Given that all previous randomized controlled trials evaluating this were stopped early due to recruitment challenges, this cohort data provides evidence for decision-making.

Maternal fever during labor and the risk of neonatal encephalopathy: duration and magnitude of Hyperthermia

Marie-Coralie Cornet, Michael W Kuzniewicz, Aaron W Scheffler, et al. Am J Obstet Gynecol

This population-based cohort study involving 248,594 laboring individuals found a strong dose- response relationship between maternal fever and the risk of neonatal hypoxic-ischemic encephalopathy (HIE). Researchers observed that the presence of any maternal fever ($\geq 38^{\circ}\text{C}$) was associated with a nearly four-fold increased risk of HIE (RR 3.92), and even mild temperature elevations between 37.5°C and 37.9°C nearly doubled the risk (RR 1.70) compared to temperatures below 37.5°C . The data specifically highlights that the risk intensifies with both the magnitude and duration of hyperthermia: infants born to mothers with a peak temperature of $\geq 39^{\circ}\text{C}$ or those where the duration from fever onset to delivery exceeded 4-6 hours faced the highest risks of adverse outcomes, including HIE, neonatal seizures, and the need for therapeutic hypothermia. These associations remained significant even after adjusting for labor duration and the timing of membrane rupture, suggesting that maternal hyperthermia itself, rather than just prolonged labor, is a critical independent risk factor for neonatal brain injury.

OTHER NOTEWORTHY PUBLICATIONS – December, 2025

Pediatrics Association between gut microbiota development and allergy in infants born during pandemic-related social distancing restrictions

<https://pubmed.ncbi.nlm.nih.gov/41320048/>

Associations between diet diversity during infancy and atopic disease in later life: systematic review

<https://pubmed.ncbi.nlm.nih.gov/41320025/>

Journal of Pediatrics

Early vitamin D supplementation in infants born extremely preterm and fed human milk: a randomized controlled trial

<https://pubmed.ncbi.nlm.nih.gov/40714046/>

Sleep electroencephalogram in infants born moderate to late preterm and association with subsequent neurodevelopment

<https://pubmed.ncbi.nlm.nih.gov/40683457/>

Nasopharyngeal prongs versus ram cannula for delivering noninvasive positive pressure ventilation: an open-label, randomized controlled trial

<https://pubmed.ncbi.nlm.nih.gov/40783048/>

Severity of bronchopulmonary dysplasia using a contemporary Canadian definition and early childhood outcomes: a population-based cohort study

<https://pubmed.ncbi.nlm.nih.gov/40783050/>

Radiographic severity of neonatal deep medullary venous thrombosis is associated with neurodevelopmental impairment

<https://pubmed.ncbi.nlm.nih.gov/40783051/>

Probiotic receipt and neurodevelopmental outcomes of infants <29 weeks gestation: a cohort study

<https://pubmed.ncbi.nlm.nih.gov/40846205/>

Maternal mental health and emergency department visits for infants born preterm and enrolled in a transition home program before and during the COVID-19 pandemic

<https://pubmed.ncbi.nlm.nih.gov/40712743/>

The impact of inhaled corticosteroids on lung inflammation and clinical outcomes in children with oropharyngeal dysphagia

<https://pubmed.ncbi.nlm.nih.gov/40783047/>

Gestational diabetes mellitus and school-age cognitive and health outcomes in New Zealand: a matched cohort study

<https://pubmed.ncbi.nlm.nih.gov/40714050/>

Missed opportunities: single-center insights into prenatal cardiac palliative care

<https://pubmed.ncbi.nlm.nih.gov/40848755/>

Severity of bronchopulmonary dysplasia in infants born extremely preterm and randomized to early human milk fortification with a donor milk-derived fortifier for 2 weeks

<https://pubmed.ncbi.nlm.nih.gov/40714049/>

Pediatric Research

Cerebrovascular autoregulation and preterm brain injury: a systematic review and meta-analysis

<https://pubmed.ncbi.nlm.nih.gov/40316680/>

Everolimus and sirolimus in the treatment of cardiac rhabdomyomas in neonates

<https://pubmed.ncbi.nlm.nih.gov/40287604/>

The impact of sleep in high-risk infants

<https://pubmed.ncbi.nlm.nih.gov/40210954/>

Attention problems in children born very preterm: evidence from a performance-based measure

<https://pubmed.ncbi.nlm.nih.gov/40204869/>

Correlation between histologic chorioamnionitis and severe retinopathy of prematurity

<https://pubmed.ncbi.nlm.nih.gov/40379840/>

Sustained breastfeeding associations with brain structure and cognition from late childhood to early adolescence

<https://pubmed.ncbi.nlm.nih.gov/40382469/>

A sibling study of the prenatal and perinatal risks for cerebral palsy

<https://pubmed.ncbi.nlm.nih.gov/40316681/>

Neurodevelopmental outcomes after red cell transfusion exposure in male versus female extremely preterm infants

<https://pubmed.ncbi.nlm.nih.gov/40456918/>

Impact of fetal inflammatory response on brain MRI abnormalities in extremely preterm infants

<https://pubmed.ncbi.nlm.nih.gov/40555782/>

Severity of punctate white matter lesions in preterm infants: antecedents and cerebral palsy prediction

<https://pubmed.ncbi.nlm.nih.gov/40447822/>

Preterm infants on high-frequency oscillatory ventilation: electrical impedance tomography during lung recruitment

<https://pubmed.ncbi.nlm.nih.gov/40467977/>

Longitudinal analysis of urinary I-FABP in extremely preterm infants that develop necrotizing enterocolitis

<https://pubmed.ncbi.nlm.nih.gov/39550515/>

Whole blood biophysical immune profiling of newborn infants correlates with immune responses

<https://pubmed.ncbi.nlm.nih.gov/40164874/>

Cyclohexanone and metabolites exposure in critically ill neonates and children

<https://pubmed.ncbi.nlm.nih.gov/40188215/>

Necrotizing enterocolitis: diagnosis with plasma IgG anti-tissue transglutaminase antibodies

<https://pubmed.ncbi.nlm.nih.gov/40234717/>

Enhancing shared decision-making for infants in the intensive care unit: lessons from parents

<https://pubmed.ncbi.nlm.nih.gov/40247117/>

DNA haplogroups and circulating cell-free mitochondrial DNA as biomarkers of bronchopulmonary dysplasia

<https://pubmed.ncbi.nlm.nih.gov/40247115/>

Association of patent ductus arteriosus duration with bronchopulmonary dysplasia and mortality: a cohort study

<https://pubmed.ncbi.nlm.nih.gov/40329082/>

Effect of phototherapy on cardiac function in full term neonates with unconjugated hyperbilirubinemia

<https://pubmed.ncbi.nlm.nih.gov/40341252/>

Bronchopulmonary dysplasia: signatures of monocyte-macrophage reactivity and tolerance define novel placenta-lung endotypes

<https://pubmed.ncbi.nlm.nih.gov/40175585/>

Dose-related systemic and cerebral hemodynamic effects of norepinephrine in newborn piglets with hypoxia-reoxygenation

<https://pubmed.ncbi.nlm.nih.gov/40181145/>

Everolimus and Sunitinib potentially work as therapeutic drugs for infantile hemangiomas

<https://pubmed.ncbi.nlm.nih.gov/40188217/>

Archives of Disease in Childhood - Fetal & Neonatal Edition

No December content

Journal of Perinatology

Using a lower platelet transfusion threshold: translating evidence into practice

<https://pubmed.ncbi.nlm.nih.gov/41116035/>

A narrative review of the clinical applications of renal NIRS and integration with cerebral NIRS in the NICU

<https://pubmed.ncbi.nlm.nih.gov/40234599/>

Effect of glucose on pain relief during invasive procedures in premature infants: Systematic review and meta-analysis of randomized controlled trials

<https://pubmed.ncbi.nlm.nih.gov/41193647/>

Dexmedetomidine's effect on neonatal sedation, pain, respiratory status and cardiovascular system <https://pubmed.ncbi.nlm.nih.gov/40908310/>

Parental perception of pain in premature babies in neonatal intensive care unit: a qualitative study <https://pubmed.ncbi.nlm.nih.gov/40721653/>

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

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

Day-2 echocardiography and cardiovascular biomarkers measurements in neonates with hypoxic-ischemic encephalopathy with or without brain injury

<https://pubmed.ncbi.nlm.nih.gov/40973722/>

Clinical risk factors and adverse perinatal outcomes among U.S. and African-born Black women in California

<https://pubmed.ncbi.nlm.nih.gov/40681838/>

Association of maternal primary language with neurodevelopmental outcomes in high-risk infants <https://pubmed.ncbi.nlm.nih.gov/41023169/>

Association of low hospital birth volume and adverse short-term outcomes for neonates treated with therapeutic hypothermia in rural states

<https://pubmed.ncbi.nlm.nih.gov/40617961/>

Early parenteral lipid intake supports cerebellar neurometabolism at term-age in preterm infants <https://pubmed.ncbi.nlm.nih.gov/40550844/>

Risk factors associated with the development of necrotizing enterocolitis in preterm infants on an exclusive human milk diet: a single-center case-control study

<https://pubmed.ncbi.nlm.nih.gov/40885806/>

Gestational age-based outcomes of neonates with Down syndrome in the neonatal intensive care unit (NICU): review of pediatric health information system (PHIS) database <https://pubmed.ncbi.nlm.nih.gov/40797022/>

Categorizing weight growth of infants born before 32 weeks' gestation using the 2023 postnatal growth charts for preterm infants

<https://pubmed.ncbi.nlm.nih.gov/40797023/>

Distinct gastroesophageal reflux characteristics in preterm-born infants fed human milk versus formula: insights for clinical practice on outcomes

<https://pubmed.ncbi.nlm.nih.gov/40962822/>

Feeding outcomes of preterm infants discharged with feeding tubes

<https://pubmed.ncbi.nlm.nih.gov/40968141/>

Gastroesophageal reflux during postpyloric versus gastric tube feeding in preterm infants with bronchopulmonary dysplasia

<https://pubmed.ncbi.nlm.nih.gov/40210988/>

Association of NICU design on neurodevelopmental outcomes in preterm neonates born at less than 29 weeks' gestation: a retrospective observational study

<https://pubmed.ncbi.nlm.nih.gov/41073768/>

The association of NICU capacity strain with neonatal mortality and morbidity

<https://pubmed.ncbi.nlm.nih.gov/41116036/>

The nucleated red blood cell count at birth, the volume of red cell transfusions received, and the risk of developing retinopathy of prematurity

<https://pubmed.ncbi.nlm.nih.gov/41299097/>

Neonatologists' perceptions of uncertainty: a national survey

<https://pubmed.ncbi.nlm.nih.gov/40253559/>

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

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

Identifying barriers to complying with new restrictive NICU transfusion guidelines

<https://pubmed.ncbi.nlm.nih.gov/39955456/>

An improvement project standardizing low prophylactic platelet transfusion dosing for infants <https://pubmed.ncbi.nlm.nih.gov/40634587/>

Development and implementation of restrictive platelet transfusion thresholds in a neonatal intensive care unit

<https://pubmed.ncbi.nlm.nih.gov/40259097/>

Involving neonatal hematology and transfusion medicine in global efforts to eliminate severe retinopathy of prematurity

<https://pubmed.ncbi.nlm.nih.gov/40702158/>

Does intratracheal budesonide mixed with surfactant increase survival without bronchopulmonary dysplasia in extremely preterm infants?

<https://pubmed.ncbi.nlm.nih.gov/40819139/>

Neonatology

The Effect of Oral Immunotherapy on Preterm Neonates: A Promising Adjuvant Therapy in a Clinical Trial Study <https://pubmed.ncbi.nlm.nih.gov/40690903/>

Neonatal Training across Union of European Medical Specialists Member Countries: A Survey from the Next Generation of Neonatologists

<https://pubmed.ncbi.nlm.nih.gov/40738026/>

Impact of 2022 AAP Neonatal Hyperbilirubinemia Guidelines in a Middle-Income Country: A Single-Center Study in Thailand <https://pubmed.ncbi.nlm.nih.gov/40815110/>

Treatment with Plasma Transfusion and Plasma-Derived Human Plasminogen in a Newborn with Plasminogen Deficiency and Recurrent Hydrocephalus: A Case Report
<https://pubmed.ncbi.nlm.nih.gov/40618734/>

Neonatal Thymic Hemorrhage Secondary to Vitamin K Deficiency: A Case Report
<https://pubmed.ncbi.nlm.nih.gov/40706579/>

Management of Apnoea in Extremely Preterm Infants: A European Survey
<https://pubmed.ncbi.nlm.nih.gov/40914955/>

Association of Heart Rate Variability with Postnatal Maturation in Preterm Infants
<https://pubmed.ncbi.nlm.nih.gov/40652921/>

Neurobehavioral Outcomes at 10 Years of Age following Delayed Umbilical Cord Clamping: A Follow-Up Study after a Randomized Trial
<https://pubmed.ncbi.nlm.nih.gov/40744000/>

Continuous Chest Compressions with Asynchronous Ventilation in Asphyxiated Preterm Lambs with Asystole <https://pubmed.ncbi.nlm.nih.gov/40753890/>

Neonatal Outcomes of the Intubation-Surfactant-Extubation versus Less Invasive Surfactant Administration Method: A National Cohort Study in Korea
<https://pubmed.ncbi.nlm.nih.gov/40730036/>

Preoperative Cerebral and Renal Saturations in Neonates with Congenital Heart Defects: A Prospective Cohort Study <https://pubmed.ncbi.nlm.nih.gov/40701141/>

Association between Growth Trajectories and Body Composition Outcomes in Very Preterm Infants: A Cohort Study <https://pubmed.ncbi.nlm.nih.gov/40820518/>

Cerebral Oxygenation Pattern during Therapeutic Hypothermia after Perinatal Asphyxia: A Single Center Cohort Study <https://pubmed.ncbi.nlm.nih.gov/40892693/>

Cognitive Outcomes of Extremely Preterm Infants at 6.5 Years after Postnatal Corticosteroid Treatment: A Pilot Study <https://pubmed.ncbi.nlm.nih.gov/40911503/>
Respiratory Support prior to Cord Clamping in Very Preterm Infants: A Narrative Review with Pooled Results from Recent Studies <https://pubmed.ncbi.nlm.nih.gov/40875705/>

American Journal of Perinatology

Comparing umbilical cord management strategies in nonvigorous newborns: a systematic review and network meta-analysis

<https://pubmed.ncbi.nlm.nih.gov/40315887/>

Bacteriological profile and antibiotic susceptibility patterns of late-onset neonatal sepsis in levels III and IV neonatal intensive care units

<https://pubmed.ncbi.nlm.nih.gov/40324466/>

ECMO use in neonates with hypoxic-ischemic encephalopathy: a state-of-the-art narrative review of feasibility, efficacy, and safety

<https://pubmed.ncbi.nlm.nih.gov/40506020/>

Association of cytomegalovirus infection in preterm infants and neonatal outcomes: a matched cohort study

<https://pubmed.ncbi.nlm.nih.gov/40306639/>

Association of prepregnancy obesity versus excessive gestational weight gain with adverse neonatal outcomes in the United States

<https://pubmed.ncbi.nlm.nih.gov/40132984/>

Improving understanding of macrosomia with a graphics-based educational tool: a randomized controlled trial (mate)

<https://pubmed.ncbi.nlm.nih.gov/40132983/>

Head ultrasound findings in infants with birth weight >1,500 g and gestational age >32 weeks exposed to prenatal opioids

<https://pubmed.ncbi.nlm.nih.gov/40157368/>

Trends in invasive prenatal testing, diagnosis, and abortion for fetal aneuploidy

<https://pubmed.ncbi.nlm.nih.gov/40306636/>

Prevalence and risk factors for depression among parents of children born preterm: a systematic review and meta-analysis of the evidence since 2000

<https://pubmed.ncbi.nlm.nih.gov/40154530/>

The association of adverse perinatal outcomes in pregnancies with gestational diabetes and excessive gestational weight gain according to obesity status

<https://pubmed.ncbi.nlm.nih.gov/40164136/>

Early effective antibiotic therapy and meningitis following a bloodstream infection in hospitalized infants: a cohort study

<https://pubmed.ncbi.nlm.nih.gov/40154528/>

Maternal and neonatal outcomes in gestational hypertension for delivery at 37 versus 38 to 40 weeks

<https://pubmed.ncbi.nlm.nih.gov/40164137/>

Impact of the transition of neonatal body temperature from resuscitation to admission on prematurity complications: a retrospective observational study

<https://pubmed.ncbi.nlm.nih.gov/40306638/>

Neuroprotective effects of quercetin in neonatal hypoxic-ischemic brain injury: a meta-analysis

<https://pubmed.ncbi.nlm.nih.gov/40306637/>

Journal of Neonatal-Perinatal Medicine

No new content

Maternal Health, Neonatology and Perinatology

Respiratory distress in neonates with gestational age \geq 35 weeks and associations between risk factors & respiratory distress

<https://pubmed.ncbi.nlm.nih.gov/41361853/>

Epidemiology of perinatal asphyxia among newborns in Ethiopia: a systematic review and meta-analysis of incidence and risk factors

<https://pubmed.ncbi.nlm.nih.gov/41327458/>

How did we get here? a qualitative study of contributors to traumatic birth experiences in Nicu parents

<https://pubmed.ncbi.nlm.nih.gov/41199395/>

Neonatal malnutrition, body composition, and childhood obesity in critically ill infants

<https://pubmed.ncbi.nlm.nih.gov/41194224/>

Determinants of neonatal near miss among newborns admitted to Sos mother & child hospital, Banadir region, Somalia: a case-control study

<https://pubmed.ncbi.nlm.nih.gov/41188980/>

Development and validation of a nomogram for predicting neonatal acute kidney injury in very low birth weight infants

<https://pubmed.ncbi.nlm.nih.gov/41430341/>

JAMA Pediatrics

Antenatal corticosteroid in twin-pregnant women at risk of late preterm delivery: a randomized clinical trial

<https://pubmed.ncbi.nlm.nih.gov/40982289/>

Nurse workload and missed nursing care in neonatal intensive care units

<https://pubmed.ncbi.nlm.nih.gov/41051752/>

BMC Pediatrics

Understanding the challenges: preterm birth and middle childhood psychomotor skills - a case control study

<https://pubmed.ncbi.nlm.nih.gov/41476303/>

Pediatric Critical Care Medicine

Follow-up brain MRI after carotid reconstruction or ligation in neonatal venoarterial extracorporeal membrane oxygenation: single-center retrospective cohort, 2009–2022

<https://pubmed.ncbi.nlm.nih.gov/41307464/>

New England Journal of Medicine

Updated evidence for COVID-19, RSV, and influenza vaccines for 2025–2026

<https://pubmed.ncbi.nlm.nih.gov/41160817/>

From crisis to action — policy pathways to reverse the rise in congenital syphilis
<https://pubmed.ncbi.nlm.nih.gov/41395865>

Lancet

Inclusion of women who are pregnant, lactating, or of reproductive potential in clinical trials: health, ethical, and regulatory considerations
<https://pubmed.ncbi.nlm.nih.gov/41429679>

JAMA

Syphilis: a review
<https://pubmed.ncbi.nlm.nih.gov/41100079>

First-trimester COVID-19 vaccination not associated with congenital risks
<https://pubmed.ncbi.nlm.nih.gov/41171258>

Stillbirths in the United States
<https://pubmed.ncbi.nlm.nih.gov/41143832>

Gestational weight gain and pregnancy outcomes after GLP-1 receptor agonist discontinuation
<https://pubmed.ncbi.nlm.nih.gov/41284263>

BMJ

No relevant articles

Pediatric Infectious Disease Journal

Epidemiology of infant group B streptococcus infection in New Zealand: a 10-year retrospective study
<https://pubmed.ncbi.nlm.nih.gov/40587565>

Neonatal staphylococcus aureus bacteraemia: a 12-year retrospective study on treatment duration and relapse
<https://pubmed.ncbi.nlm.nih.gov/40720839>

Resistance pattern of gram-negative bacilli from tertiary neonatal intensive care units in Canada
<https://pubmed.ncbi.nlm.nih.gov/40829130>

Gaps in the care of maternal and congenital syphilis in Hawai'i, 2022–2023
<https://pubmed.ncbi.nlm.nih.gov/40829011>

Pediatric Cardiology

Premature closure of the ductus arteriosus and veno-arterial extracorporeal membrane oxygenation in critically ill neonates: a 10-year single-center retrospective study

<https://pubmed.ncbi.nlm.nih.gov/39073480/>

Antenatal risk of coarctation for newborns at Hartford hospital (arch) pathway: a predictor of postnatal management strategy

<https://pubmed.ncbi.nlm.nih.gov/39375211/>

Comparison of necrotizing enterocolitis after surgical norwood versus hybrid stage 1 palliation

<https://pubmed.ncbi.nlm.nih.gov/39522070/>

Pediatric Neurology

Unforeseen positive impacts of a neonatal encephalopathy teleconsultation program: insights from clinicians practicing in a rural state

<https://pubmed.ncbi.nlm.nih.gov/41014806/>

Obstetrics and Gynecology

Small-for-gestational-age birth weight risk stratification using first-trimester fetal cardiac parameters

<https://pubmed.ncbi.nlm.nih.gov/40839884/>

American Journal of Obstetrics & Gynecology

Maternal fever during labor and the risk of neonatal encephalopathy: duration and magnitude of hyperthermia

<https://pubmed.ncbi.nlm.nih.gov/40754173>

Increased frequency of autism by previous diagnosis and screening in children with fetal-neonatal alloimmune thrombocytopenia with and without an intracranial hemorrhage

<https://pubmed.ncbi.nlm.nih.gov/40582444>

Customized growth charts for twin vs singleton pregnancies and their ability to identify small for gestational age-associated risk of adverse perinatal outcome

<https://pubmed.ncbi.nlm.nih.gov/40754176>

Outcomes with cesarean delivery vs vaginal birth in extremely preterm breech singletons

<https://pubmed.ncbi.nlm.nih.gov/40653067>

Once gestational diabetes, always gestational diabetes? Maternal and neonatal outcomes of pregnancies with gestational diabetes preceding nongestational diabetes pregnancy: a retrospective cohort study

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Expanded noninvasive prenatal screening for dominant single-gene disorders: proof-of-concept, performance, and challenges

<https://pubmed.ncbi.nlm.nih.gov/40550458>

The relationship between virtual antenatal care and pregnancy outcomes in a diverse UK inner-city population: a group-based trajectory modeling approach using routine health records

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Prenatal diagnosis of fetal brain asymmetry with normal amniotic fluid genetic testing: a somatic variant in the brain

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Performance of tunnelled, noncuffed central venous catheters and PICCs in infants

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A policy scan on plans of safe care for infants with prenatal substance exposure

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Neonatal abstinence syndrome in the MATernal and Infant clinical Network

<https://pubmed.ncbi.nlm.nih.gov/41224120>

BASIC SCIENCE SELECTIONS

Dexamethasone regulates the SIRT1/NF-kappaB signaling pathway in neonatal rats with bronchopulmonary dysplasia to counteract NLRP3-inflammasome-induced pyroptosis and oxidative stress

<https://www.ncbi.nlm.nih.gov/pubmed/41418852>

Hypoxic mesenchymal stem cell exosome-derived SLC25A3 ameliorates bronchopulmonary dysplasia by modulating macrophage polarization and oxidative stress

<https://pubmed.ncbi.nlm.nih.gov/41408879/>

Intratracheal administration of mesenchymal stem cells ameliorates hyperoxia-induced bronchopulmonary dysplasia by inhibiting NLRP3 inflammasome activation: the critical role of Aldh1a2

<https://pubmed.ncbi.nlm.nih.gov/41382115/>

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Melatonin ameliorates bronchopulmonary dysplasia by modulating the NF-kappaB pathway via the gut microbiota-short-chain fatty acid axis

<https://www.ncbi.nlm.nih.gov/pubmed/41151484>

Adrenomedullin overexpression protects mice from experimental

bronchopulmonary dysplasia and associated pulmonary hypertension

<https://www.ncbi.nlm.nih.gov/pubmed/41083253>

Omega-3 polyunsaturated fatty acids and the eicosapentaenoic acid metabolite 18-hydroxyeicosapentaenoic acid (18-HEPE) attenuate experimental necrotizing enterocolitis

<https://www.ncbi.nlm.nih.gov/pubmed/41192334>

Promoting astrocyte-neuron triiodothyronine shuttling attenuates brain damage in neonatal hypoxic-ischemic encephalopathy

<https://www.ncbi.nlm.nih.gov/pubmed/41331484>

Increased expression of WNK3 during the perinatal period in newborn rats with hypoxic-ischemic encephalopathy

<https://www.ncbi.nlm.nih.gov/pubmed/40993905>

The umbilical cord blood exosome MFG-E8 alleviates hypoxic-ischemic encephalopathy brain injury in neonatal rats by restoring autophagy flux and inhibiting ferroptosis through GSK3beta/beta-catenin signaling

<https://www.ncbi.nlm.nih.gov/pubmed/40689375>

Other relevant articles

Umbilical Artery Leucine-Rich alpha-2 Glycoprotein as a Predictor of Bronchopulmonary Dysplasia in Preterm Infants

<https://www.ncbi.nlm.nih.gov/pubmed/41368705>

New biomarkers to predict the need for surgery of necrotizing enterocolitis: a study based on abdominal X-ray radiomics and machine learning

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The impact of early stoma closure on infants after surgery for necrotizing enterocolitis (NEC): real-world data analysis

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Outcomes of primary intestinal anastomosis versus stoma in necrotizing enterocolitis: A systematic review and meta-analysis

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Efficacy of probiotic supplementation in preventing necrotizing enterocolitis in preterm infants: a systematic review and meta-analysis

<https://www.ncbi.nlm.nih.gov/pubmed/40204632>

Nutrition in infants with hypoxic-ischemic encephalopathy: insights from a single-center experience on parenteral and enteral feeding during therapeutic hypothermia <https://www.ncbi.nlm.nih.gov/pubmed/41338591>