Publications Working Group
Ayan Rajgarhia, Page Editor - Children's Mercy Hospital
Craig Nankervis - Nationwide Children's Hospital
Christopher Rouse - Massachusetts General Hospital for Children
Vineet Lamba - University of Tennessee Health Science Center
Ranjith Kamity - NYU Long Island School of Medicine
L. Corbin Downey - Atrium Health Wake Forest Baptist

American Academy of Pediatrics
DEDICATED TO THE HEALTH OF ALL CHILDREN®

Section on Neonatal-Perinatal Medicine

ARTICLES OF INTEREST – October 2022

Association between duration of early empiric antibiotics and necrotizing enterocolitis and late-onset sepsis in preterm infants: a multicenter cohort study
Thomas H Dierikx, Nancy Deianova, Jip Groen, et al. *Eur J Pediatr.*

This study examines the extent of early empiric antibiotic exposure (EEAE) in preterm infants and the association between the duration of EEAE with necrotizing enterocolitis (NEC) and late-onset sepsis (LOS) within different EEAE groups. A total of 1122 infants (89.1%) were exposed to empirical antibiotics for the suspicion of EOS of whom 802 (63.7%) had short (</= 72 h) and 320 (25.4%) prolonged EEAE (> 72 h). Infants with EEAE </= 72 h had a lower incidence of NEC compared to both infants without EEAE (adjusted odds ratio (aOR) 0.39; 95% confidence interval (CI) [0.19-0.80]; p = 0.01) and with prolonged EEAE (> 72 h) (aOR [95%CI]: 0.58 [0.35-0.96]; p = 0.03). With every additional day of EEAE, LOS incidence decreased (aOR [95%CI]: 0.90 [0.85-0.97]; p = 0.003). A short course of empirical antibiotics (</=72h) is associated with decreased odds for necrotizing enterocolitis compared to both prolonged (>72h) or no empirical antibiotics after birth. Furthermore, every additional day of empirical antibiotic exposure is associated with decreased risk for late-onset sepsis in the first month of life.

A hydrogen-sulfide derivative of mesalamine reduces the severity of intestinal and lung injury in necrotizing enterocolitis through endothelial nitric oxide synthase
Brian D Hosfield, Chelsea E Hunter, Hongge Li, et al. *Am J Physiol Regul Integr Comp Physiol.*

It was hypothesized that oral H2S-Mesalamine (ATB-429) would improve outcomes in experimental NEC, and its benefits would be dependent on endothelial nitric oxide synthase (eNOS) pathways. Four groups were studied in both wild-type (WT) and eNOS knockout (eNOSKO) mice: 1) breastfed controls, 2) NEC, 3) NEC + 50 mg/kg mesalamine, and 4) NEC + 130 mg/kg ATB-429. Intestine and lung were hematoxylin and eosin-stained and scored for injury in a blind fashion. TLR4 expression was quantified by Western blot and IL-6 expression by ELISA. P < 0.05 was significant. Both WT and eNOSKO breastfed controls underwent normal development and demonstrated milder intestinal and pulmonary injury compared with NEC groups. For the WT groups, ATB-429 significantly improved weight gain, reduced clinical sickness score, and improved perfusion compared with the NEC group. An H2S derivative of mesalamine improves outcomes in experimental NEC. Protective effects appear to be mediated through eNOS.

Changes in preterm birth during the COVID-19 pandemic by duration of exposure and race and ethnicity
Anne M Mullin, Sara C Handley, Lisbet Lundsberg, et al. *J Perinatol.*

The authors aimed to determine whether coronavirus-disease-2019 (COVID-19) pandemic exposure duration was associated with preterm birth (PTB) and if the pandemic modified racial disparities. Overall, they detected no pandemic effects on PTB, but potential indirect benefits for some patients which could widen disparities remains possible.

Lesion-specific congenital heart disease mortality trends in children: 1999 to 2017
Melodie M Lynn, Jason L Salemi, Stefan P Kostelyna, et al. *Pediatrics.*

The authors aimed to describe pediatric mortality trends by CHD lesion in the United States. They found that CHD mortality is decreasing for most lesions. Because of the heterogenicity of CHD lesions, there is expected variability in mortality trends by lesion and age group. Single ventricle lesions continue to contribute most heavily to premature death because of CHD demonstrated by significant increases in mortality rate for children aged 5 to 17 years.

Active treatment of infants born at 22-25 weeks of gestation in California, 2011-2018
Xuxin Chen, Tianyao Lu, Jeffrey Gould, et al. *J Pediatr.*

In California, active treatment rates at 23 weeks of gestation increased between 2011 and 2018, but rates at 22 weeks did not. At 22 and 23 weeks, rates increased during the latter part of the week. Several maternal and infant factors were associated with the likelihood of active treatment. Factors associated with increased odds of active treatment included maternal Hispanic ethnicity and Black race, preterm premature rupture of membranes, obstetrical bleeding, antenatal steroids, and cesarean delivery. Factors associated with decreased odds included lower gestational age and small for gestational age birth weight.

Early brain and abdominal oxygenation in extremely low birth weight infants
Valerie Y Chock, Emily Smith, Sylvia Tan, et al. *Pediatr Res.*

The authors describe a prospective study evaluating changes in cerebral and mesenteric saturation (Csat; Msat) over the first week after birth in ELBW preterm infants using NIRS. The study showed that both Csat and Msat declined over the first week, with a corresponding increase in oxygen extraction (n=124). Oxygen extraction (FTOE) increased more in the brain compared to the gut in infants with lower gestational age and birth weight, and 5-min Apgar score ≤5. Infants managed with a lower hemoglobin transfusion threshold receiving ≥2 transfusions in the first week had the lowest Csat and highest cFTOE ($p < 0.001$). The authors concluded that brain oxygen extraction preferentially increased in more immature and anemic preterm infants.

Oral versus intravenous paracetamol for patent ductus arteriosus closure in preterm infants
Ayala Gover, Philip T Levy, Avi Rotschild, et al. *Pediatr Res.*

This retrospective study compared oral or intravenous paracetamol as the first-line treatment for PDA constriction in preterm infants <37 weeks. Of 80 preterm infants who received paracetamol, 50 received it as first-line treatment for PDA constriction. Oral group had higher closure rate (15/19, 79%) versus intravenous group (8/20, 40%; $p<0.01$) retaining significance after adjusting for gestational age, length of treatment, and postnatal age (OR 0.14, 95% CI 0.03-0.67, $p = 0.014$, RR 0.51, 95% CI 0.28-0.91). Combined oral and intravenous paracetamol had a closure rate of 45% (5/11). The study concluded that oral paracetamol as first-line agent is more effective for PDA constriction than intravenous paracetamol.

SIDS is associated with prenatal drug use: a meta-analysis and systematic review of 4,238,685 infants
Louise Makarious, Arthur Teng and Ju Lee Oei. *Arch Dis Child Fetal Neonatal Ed.*

This systematic review included cohort, population or case studies comparing the incidence of SIDS among drug-exposed with drug-free controls (36,730 infants with any prenatal drug exposure, 21,661 exposed to opioids, 21,571 exposed to cocaine, 5,031 exposed to methadone compared with 4,201,955 with no exposure). Any prenatal drug exposure was associated with an increased crude risk of SIDS (RR 7.84, 95% CI 5.21 to 11.81). Prenatal opioid exposure had the highest associative crude risk of SIDS (RR 9.76, 95% CI 5.28 to 18.05), followed by methadone (RR 9.52, 95% CI 4.60 to 19.70) and cocaine (RR

4.40, 95% CI 2.52 to 7.67). Increased crude risk persisted after adjusting for socioeconomic factors (RR 4.24, 95% CI 1.39 to 12.88).

Effect of enteral long-chain polyunsaturated fatty acids on retinopathy of prematurity: a systematic review and meta-analysis
Shivashankar Diggikar, Abhishek Somasekhara Aradhya, Ravi Shankar Swamy, et al. *Neonatology.*

This meta-analysis included 9 RCTs of 2,482 infants. Of the nine RCTs, six studies provided LCPUFA as a separate intervention in different concentrations, and three studies provided formula milk enriched with LCPUFA. In addition, five studies recruited infants below 32 weeks of gestational age. Supplementation of LCPUFA did not reduce the incidence of severe ROP with very low CoE (RR 0.71, 95% CI: 0.50-1.01, 5 studies, 1,822 infants), any ROP with very low CoE
(RR 0.95, 95% CI: 0.73-1.12, 6 studies, 1,177 infants), or ROP requiring treatment with very low CoE (RR 0.92, 95% CI: 0.62-1.38, 4 studies, 1,395 infants).

Laryngeal mask airway for surfactant administration versus standard treatment methods in preterm neonates with respiratory distress syndrome: a systematic review and meta-analysis
Roqaia Ayesh Al Ali, Bishal Gautam, Michael R Miller, et al. *Am J Perinatol.*

This meta-analysis of six randomized controlled trials with 357 participants compares surfactant delivery via laryngeal mask airway compared with control (continuous positive airway pressure or surfactant via endotracheal tube). Birth weight, gestational age, mode of delivery and prespecified criterion for surfactant administration were comparable between LMA and control group for each study. Surfactant administration via LMA significantly reduced the FiO2 requirement from the baseline (mean difference = 10.55, 95% CI: 5.66–15.44, n = 105, $p < 0.001$). LMA was associated with significant reduction in need for MV compared with the control group (RR = 0.49, 95% CI: 0.38–0.63, $p < 0.001$, number needed to treat [NNT] = 4; the need for intubation (RR = 0.28, 95% CI: 0.14–0.58, p = 0.0006, NNT = 1.8). The need of repeat dose of surfactant in LMA group was comparable to surfactant via ETT group. There were no significant differences between control and intervention groups in terms of death, BPD, and pneumothorax. This study has several limitations largely due to small sample size and heterogeneity, but it suggests that LMA might be useful used as an effective means of delivery of surfactant for neonates with RDS, particularly in resource limited setting.

The U.S. national trend for retinopathy of prematurity
Hany Aly, Hasan F Othman, Chelsea Munster, et al. *Am J Perinatol.*

This study analyzed deidentified patient data from the National Inpatient Sample (NIS) of the Healthcare Cost and Utilization Project (HCUP) from 2002 to 2017. All infants with gestational age ≤32 weeks and birth weight <1,500 g were included. A total of 818,945 neonates were included in the study. Mortality within the cohort was at 16.2%. A total of 17.5% of neonates in the study were diagnosed with ROP. Both ROP and severe ROP trends increased significantly over the years ($p < 0.001$). In 2002, a total of 958 neonates were diagnosed with ROP, whereas 10,725 neonates were diagnosed with ROP in 2017. Severe ROP (stages 3, 4, and 5) has increased from 0.5 (2008) to 3.6% (2017). A total of 57 infants were diagnosed with blindness during the 16-year study period. There was no trend for increased or decreased blindness over the years. Prevalence of both ROP and severe ROP increased significantly over the study period. LOS also had increased, while the prevalence of NEC did not change. Increased ROP and severe ROP were consistent in the three GA and BW subgroups.

OTHER NOTEWORTHY PUBLICATIONS – October, 2022

COVID-19
Epidemiology of neonatal COVID-19 in the United States
https://pubmed.ncbi.nlm.nih.gov/35996224/

The NICU during COVID-19 Pandemic: Impact on Maternal Pediatric Medical Traumatic Stress (PMTS)
https://pubmed.ncbi.nlm.nih.gov/34883523/
Effects of the SARS-CoV-2 pandemic on perinatal activity in Yorkshire and the Humber region during 2020: an interrupted time series analysis
https://pubmed.ncbi.nlm.nih.gov/35545419
Evaluation of maternal-infant dyad inflammatory cytokines in pregnancies affected by maternal SARS-CoV-2 infection in early and late gestation
https://pubmed.ncbi.nlm.nih.gov/35449446
Preterm birth among pregnant persons with severe acute respiratory syndrome Coronavirus 2 infection
https://pubmed.ncbi.nlm.nih.gov/35927486
Perinatal COVID-19 maternal and neonatal outcomes at two academic birth hospitals
https://pubmed.ncbi.nlm.nih.gov/35778485
Changes in preterm birth during the COVID-19 pandemic by duration of exposure and race and ethnicity
https://pubmed.ncbi.nlm.nih.gov/35974082
No infectious SARS-CoV-2 in breast milk from a cohort of 110 lactating women
https://pubmed.ncbi.nlm.nih.gov/35042956/
Infants born to mothers who were SARS-CoV-2 positive during pregnancy and admitted to neonatal intensive care unit
https://pubmed.ncbi.nlm.nih.gov/36088904
COVID-19-associated multisystem inflammatory syndrome in a neonate with atypical coronary artery involvement
https://pubmed.ncbi.nlm.nih.gov/34996119/

Pediatrics
Lesion-specific congenital heart disease mortality trends in children: 1999 to 2017
https://pubmed.ncbi.nlm.nih.gov/36047307/
Serious bacterial infections in young febrile infants with positive urinalysis results
https://pubmed.ncbi.nlm.nih.gov/36097858/
Preterm infant outcomes at 24 months after clinician-supported web-based intervention
https://pubmed.ncbi.nlm.nih.gov/36130917/
Psychotropic medication utilization among children diagnosed with fetal alcohol spectrum disorder
https://pubmed.ncbi.nlm.nih.gov/36164844/
Standardizing the evaluation and management of necrotizing enterocolitis in a level IV NICU
https://pubmed.ncbi.nlm.nih.gov/36164852/

Journal of Pediatrics
Organizational risk factors and clinical impacts of unplanned extubation in the neonatal intensive care unit
https://pubmed.ncbi.nlm.nih.gov/35714965/
Daycare attendance is linked to increased risk of respiratory morbidities in children born preterm with bronchopulmonary dysplasia
https://pubmed.ncbi.nlm.nih.gov/35803300/
Active treatment of infants born at 22-25 weeks of gestation in California, 2011-2018
https://pubmed.ncbi.nlm.nih.gov/35714966/

Pediatric Research
Review: Development of the immune system in the human embryo
https://pubmed.ncbi.nlm.nih.gov/35042957/
Review: Perinatal and early childhood biomarkers of psychosocial stress and adverse experiences
https://pubmed.ncbi.nlm.nih.gov/35091705/
Secretory immunoglobulin A in preterm infants: determination of normal values in breast milk and stool
https://pubmed.ncbi.nlm.nih.gov/34952939/

Folate deficiency disturbs PEG10 methylation modifications in human spina bifida
https://pubmed.ncbi.nlm.nih.gov/34934172/
Circ-ITCH overexpression promoted cell proliferation and migration in Hirschsprung disease through miR-146b-5p/RET axis
https://pubmed.ncbi.nlm.nih.gov/35091706/
Differential age-dependent development of inter-area brain connectivity in term and preterm neonates
https://www.nature.com/articles/s41390-022-01939-7
Genetic variants in eleven central and peripheral chemoreceptor genes in sudden infant death syndrome
https://www.nature.com/articles/s41390-021-01899-4
Early brain and abdominal oxygenation in extremely low birth weight infants
https://pubmed.ncbi.nlm.nih.gov/35513716/
Federal regulations and neonatologists' views on care of seriously ill infants: changes over time
https://pubmed.ncbi.nlm.nih.gov/35641550/
Diaphragmatic electromyography during a spontaneous breathing trial to predict extubation failure in preterm infants
https://pubmed.ncbi.nlm.nih.gov/35523885/
Monitoring of heart rate characteristics to detect neonatal sepsis
https://pubmed.ncbi.nlm.nih.gov/34916625/
Can serum periostin predict bronchopulmonary dysplasia in premature infants?
https://pubmed.ncbi.nlm.nih.gov/34961784/
A training plan to implement lung ultrasound for diagnosing pneumonia in children
https://pubmed.ncbi.nlm.nih.gov/34969992/
Probiotic supplementation in neonates with congenital gastrointestinal surgical conditions: a pilot randomised controlled trial
https://pubmed.ncbi.nlm.nih.gov/34980887/
Early spectral EEG in preterm infants correlates with neurocognitive outcomes in late childhood
https://pubmed.ncbi.nlm.nih.gov/35013563/
Oral versus intravenous paracetamol for patent ductus arteriosus closure in preterm infants
https://pubmed.ncbi.nlm.nih.gov/35087197/
Observational study of birth outcomes in children with inborn errors of metabolism
https://pubmed.ncbi.nlm.nih.gov/35058604/

Archives of Disease in Childhood - Fetal & Neonatal Edition
Trends in the use of non-invasive respiratory support for term infants in tertiary neonatal units in Australia and New Zealand
https://pubmed.ncbi.nlm.nih.gov/35410897
Preterm infant circulating sex steroid levels are not altered by transfusion with adult male plasma: a retrospective multicenter cohort study
https://pubmed.ncbi.nlm.nih.gov/35232892
Time to positivity of blood cultures in neonatal late-onset bacteraemia
https://pubmed.ncbi.nlm.nih.gov/35273079
Respiratory function monitoring to improve the outcomes following neonatal resuscitation: a systematic review and meta-analysis
https://pubmed.ncbi.nlm.nih.gov/35058279
Availability of active therapeutic hypothermia at birth for neonatal hypoxic ischaemic encephalopathy: a UK population study from 2011 to 2018
https://pubmed.ncbi.nlm.nih.gov/35428686
Effect of antibiotics in the first week of life on faecal microbiota development
https://pubmed.ncbi.nlm.nih.gov/35534183
Comparison of neonatal morbidity and mortality between single-room and open-bay care: a retrospective cohort study
https://pubmed.ncbi.nlm.nih.gov/35444004

SIDS is associated with prenatal drug use: a meta-analysis and systematic review of 4,238,685 infants
https://pubmed.ncbi.nlm.nih.gov/35396270
Vestibular and balance dysfunction in children with congenital CMV: a systematic review
https://pubmed.ncbi.nlm.nih.gov/35545420
Online clinical tool to estimate risk of bronchopulmonary dysplasia in extremely preterm infants
https://pubmed.ncbi.nlm.nih.gov/35728925
Efficacy of occlusive wraps used for delivery room care
https://pubmed.ncbi.nlm.nih.gov/34667067
Congenital cutaneous candidiasis in one infant among a twin sibling pair
https://pubmed.ncbi.nlm.nih.gov/34045281
Congenital self-healing reticulohistiocytosis in a neonate
https://pubmed.ncbi.nlm.nih.gov/33972263
Nicolau syndrome or 'embolia cutis medicamentosa' in a newborn: successful treatment with a surgical intervention
https://pubmed.ncbi.nlm.nih.gov/33972262

Journal of Perinatology
Advancements in neonatology through quality improvement
https://pubmed.ncbi.nlm.nih.gov/35368024
Effect of enhanced recovery after surgery for elective cesarean deliveries on neonatal outcomes
https://pubmed.ncbi.nlm.nih.gov/35013588
Risk factors for death during newborn and post-newborn hospitalizations among preterm infants
https://pubmed.ncbi.nlm.nih.gov/35314759
Measuring quality of care in moderate and late preterm infants
https://pubmed.ncbi.nlm.nih.gov/35354940
Does active treatment in infants born at 22–23 weeks correlate with outcomes of more mature infants at the same hospital? An analysis of California NICU data, 2015–2019
https://pubmed.ncbi.nlm.nih.gov/35361887
Summary of neonatal and maternal transport and reimbursement policies—a 5-year update
https://pubmed.ncbi.nlm.nih.gov/35414123
Frequency of diagnostic errors in the neonatal intensive care unit: a retrospective cohort study
https://pubmed.ncbi.nlm.nih.gov/35246625
Association of early dysnatremia with mortality in the neonatal intensive care unit: results from the AWAKEN study
https://pubmed.ncbi.nlm.nih.gov/34775486
Patterns of acute kidney and hepatic injury and association with adverse outcomes in infants undergoing therapeutic hypothermia for hypoxic ischemic encephalopathy
https://pubmed.ncbi.nlm.nih.gov/35428814
Impact of quality improvement outreach education on the incidence of acute brain injury in transported neonates born premature
https://pubmed.ncbi.nlm.nih.gov/35508716
A predictive clinical model for moderate to severe intraventricular hemorrhage in very low birth weight infants
https://pubmed.ncbi.nlm.nih.gov/35780234
Neuroprotection care bundle implementation is associated with improved long-term neurodevelopmental outcomes in extremely premature infants
https://pubmed.ncbi.nlm.nih.gov/35831577
Association of early cerebral oxygen saturation and brain injury in extremely preterm infants
https://pubmed.ncbi.nlm.nih.gov/35790852
Epidemiology of post-hemorrhagic ventricular dilatation in very preterm infants
https://pubmed.ncbi.nlm.nih.gov/35945347
Neurobehavior in very preterm infants with low medical risk and full-term infants
https://pubmed.ncbi.nlm.nih.gov/35717460

#neoTwitter: evaluation of its use within the neonatal-perinatal community
https://pubmed.ncbi.nlm.nih.gov/35361886
Rates of connection to early intervention from the neonatal intensive care unit in a high risk infant follow-up program
https://pubmed.ncbi.nlm.nih.gov/35589971
Factors associated with neonatal coding knowledge: results of a national survey
https://pubmed.ncbi.nlm.nih.gov/35568763
Prevention of severe brain injury in very preterm neonates: A quality improvement initiative
https://pubmed.ncbi.nlm.nih.gov/35778486
Culturally competent care in the neonatal intensive care unit, strategies to address outcome disparities
https://pubmed.ncbi.nlm.nih.gov/35241768

Neonatology
Impact of kangaroo care on premature infants' oxygenation: systematic review
https://pubmed.ncbi.nlm.nih.gov/35732143
Effect of enteral long-chain polyunsaturated fatty acids on retinopathy of prematurity: a systematic review and meta-analysis
https://pubmed.ncbi.nlm.nih.gov/35728584
Lung ultrasound scores progress differently in extreme and very preterm infants after birth: a multicentre prospective study
https://pubmed.ncbi.nlm.nih.gov/35793660
Supplemental oxygen treats periodic breathing without effects on sleep in late-preterm infants
https://pubmed.ncbi.nlm.nih.gov/36088903
Neurodevelopmental outcome and epigenetic changes at 2 years associated with the oxygen load received upon postnatal stabilization: a pilot study
https://pubmed.ncbi.nlm.nih.gov/35760056
Survival and survival without major morbidity seem to be consistently better throughout gestational age in 24- to 30-week gestational age very-low-birth-weight female infants compared to males
https://pubmed.ncbi.nlm.nih.gov/35810743
Agreement of cardiac output estimates between electrical cardiometry and transthoracic echocardiography in very preterm infants
https://pubmed.ncbi.nlm.nih.gov/35896077
Fetal hemoglobin and cerebral tissue oxygenation during immediate postnatal transition
https://pubmed.ncbi.nlm.nih.gov/35882188
Changes of oxidative stress-related gene expression in an in vitro model of neonatal hypoxic-ischemic encephalopathy
https://pubmed.ncbi.nlm.nih.gov/36096109
The impact of maternal age on the neonatal electrocardiogram
https://pubmed.ncbi.nlm.nih.gov/35858538
Effect of the target range on arterial oxygen saturation stability in extremely premature infants
https://pubmed.ncbi.nlm.nih.gov/36030769
How climate change may threaten progress in neonatal health in the African region
https://pubmed.ncbi.nlm.nih.gov/35850106
Dishonoured: the fate of infants born out of wedlock
https://pubmed.ncbi.nlm.nih.gov/35732111

American Journal of Perinatology
Patient decisions regarding fetal monitoring in the periviable period and perinatal and maternal outcomes
https://pubmed.ncbi.nlm.nih.gov/35373308/
Neonatal septic shock and hemodynamic monitoring in preterm neonates in an NICU: added value of electrical cardiometry in real-time tailoring of management and therapeutic strategies
https://pubmed.ncbi.nlm.nih.gov/33723835/

Prenatal and postnatal management of intrauterine pleural effusions associated with nonimmune hydrops fetalis
https://pubmed.ncbi.nlm.nih.gov/33321527/
Cardiopulmonary function abnormalities in cohort of adults following bronchopulmonary dysplasia as preterm infants
https://pubmed.ncbi.nlm.nih.gov/33454944/
Fresh frozen plasma transfusion: an independent risk factor for hemodynamically significant patent ductus arteriosus in premature infants
https://pubmed.ncbi.nlm.nih.gov/33486746/
Laryngeal mask airway for surfactant administration versus standard treatment methods in preterm neonates with respiratory distress syndrome: a systematic review and meta-analysis
https://pubmed.ncbi.nlm.nih.gov/33517565/
Effects of inhaled iloprost for the management of persistent pulmonary hypertension of the newborn
https://pubmed.ncbi.nlm.nih.gov/33477175/
Mortality and morbidity in premature infants: an east and west comparative study
https://pubmed.ncbi.nlm.nih.gov/33486747/
Thiol-disulfide homeostasis in neonatal patients with urinary tract infection
https://pubmed.ncbi.nlm.nih.gov/33454949/
A retrospective cohort study on mortality and neurodevelopmental outcomes of preterm very low birth weight infants born to mothers with hypertensive disorders of pregnancy
https://pubmed.ncbi.nlm.nih.gov/33535243/
Does early neonatal thrombocytopenia affect ductal therapeutic response to acetaminophen in preterm neonates?
https://pubmed.ncbi.nlm.nih.gov/34921375/
Central line utilization and complications in infants with congenital diaphragmatic hernia
https://pubmed.ncbi.nlm.nih.gov/33535242/
Evaluation of morbidities and complications of neonatal intensive care unit patients with respiratory disorders at different gestational ages
https://pubmed.ncbi.nlm.nih.gov/33517566/
High prevalence of abnormal general movements in hospitalized very low birth weight infants
https://pubmed.ncbi.nlm.nih.gov/33535241/
Cord-blood high-sensitivity troponin-I reference interval and association with early neonatal outcomes
https://pubmed.ncbi.nlm.nih.gov/33548938/
Early growth and cognitive development in children born preterm: relevance of maternal body mass index
https://pubmed.ncbi.nlm.nih.gov/33592668/
The effect of a short course of tocolytic indomethacin on urinary biomarkers in premature infants
https://pubmed.ncbi.nlm.nih.gov/33592667/
The U.S. national trend for retinopathy of prematurity
https://pubmed.ncbi.nlm.nih.gov/33592666/
Postextubation noninvasive ventilation in respiratory distress syndrome: a randomized controlled trial
https://pubmed.ncbi.nlm.nih.gov/33621983/

Journal of Neonatal-Perinatal Medicine
No new articles

Maternal Health, Neonatology and Perinatology
Analysis of association between low birth weight and socioeconomic deprivation level in Japan: an ecological study using nationwide municipal data
https://pubmed.ncbi.nlm.nih.gov/36203206/

Neoreviews
Dis(appearance) of an arachnoid cyst: a follow-up imaging perspective
https://pubmed.ncbi.nlm.nih.gov/36180735/
Ventilator management in extremely preterm infants
https://pubmed.ncbi.nlm.nih.gov/36180732/
Diabetic embryopathies
https://pubmed.ncbi.nlm.nih.gov/36180736/
A term neonate with panting breaths
https://pubmed.ncbi.nlm.nih.gov/36180730/
Upper extremity hypotonia in a 5-week-old infant
https://pubmed.ncbi.nlm.nih.gov/36180734/
Rare cause of arrhythmia and seizures in a late-preterm newborn
https://pubmed.ncbi.nlm.nih.gov/36180729/
Double trouble: a singleton in each horn of a bicornuate uterus
https://pubmed.ncbi.nlm.nih.gov/36180737/
A neonate with dysmorphic features and respiratory distress
https://pubmed.ncbi.nlm.nih.gov/36180731/
Tracheostomy in a preterm infant with severe bronchopulmonary dysplasia
https://pubmed.ncbi.nlm.nih.gov/36180733/

JAMA Pediatrics
Preschool readiness of preterm-born children—the hidden impact of familial resilience
https://pubmed.ncbi.nlm.nih.gov/35939294/

BMC Pediatrics
Neonatal hemochromatosis with εγδβ-thalassemia: a case report and analysis of serum iron regulators
https://pubmed.ncbi.nlm.nih.gov/36309641/
A potential pathogenic hypoxia-related gene HK2 in necrotizing enterocolitis (NEC) of newborns
https://pubmed.ncbi.nlm.nih.gov/36289463/
Comparisons of care practices for very preterm infants and their short-term outcomes in two tertiary centers in northwest and south China: A retrospective cohort study
https://pubmed.ncbi.nlm.nih.gov/36271345/
Consultation of parents and healthcare professionals in end-of-life decision-making for neonates and infants: a population-level mortality follow-back physician survey
https://pubmed.ncbi.nlm.nih.gov/36241989/
Early child stimulation, linear growth and neurodevelopment in low birth weight infants
https://pubmed.ncbi.nlm.nih.gov/36209050/
Diagnostic value of the microcolon using ultrasonography in small bowel atresia
https://pubmed.ncbi.nlm.nih.gov/36203132/

Pediatric Critical Care Medicine
No relevant articles

New England Journal of Medicine
No relevant articles

Lancet
No relevant articles

JAMA
No relevant articles

BMJ

Maternal consumption of ultra-processed foods and subsequent risk of offspring overweight or obesity: results from three prospective cohort studies
https://www.ncbi.nlm.nih.gov/pubmed/36198411
Maternal hypertensive disorder of pregnancy and mortality in offspring from birth to young adulthood: national population based cohort study
https://www.ncbi.nlm.nih.gov/pubmed/36261141

Pediatric Infectious Disease Journal
Clinical features, antimicrobial resistance, and serogroups of nontyphoidal salmonella isolated from infants less than 3 months old in the recent decade
https://www.ncbi.nlm.nih.gov/pubmed/35939611
Comprehensiveness of testing among herpes simplex virus infected infants: a multicenter cohort study
https://www.ncbi.nlm.nih.gov/pubmed/35797706
Pseudomonas aeruginosa early-onset neonatal sepsis: could maternal healthcare occupation be a risk factor?
https://www.ncbi.nlm.nih.gov/pubmed/35797709
Pasteurella multocida as a rare cause of neonatal meningitis complicated by empyema
https://www.ncbi.nlm.nih.gov/pubmed/35895885

Pediatric Cardiology
Ebstein's anomaly: from fetus to adult—literature review and pathway for patient care
https://pubmed.ncbi.nlm.nih.gov/35460366/
Evaluation of an outpatient and telehealth initiative to reduce tube dependency in infants with complex congenital heart disease
https://pubmed.ncbi.nlm.nih.gov/35333946/
Late outcomes of transcatheter coarctation intervention in infants with biventricular anatomy
https://pubmed.ncbi.nlm.nih.gov/35274168/
A randomized pilot trial assessing the role of human fibrinogen concentrate in decreasing cryoprecipitate use and blood loss in infants undergoing cardiopulmonary bypass
https://pubmed.ncbi.nlm.nih.gov/35305111/
Palliation strategy to achieve complete repair in symptomatic neonates with tetralogy of fallot
https://pubmed.ncbi.nlm.nih.gov/35381860/
Association of cerebrovascular stability index and head circumference between infants with and without congenital heart disease
https://pubmed.ncbi.nlm.nih.gov/35426499/
Fetal cardiology: is it time to establish a separate independent medicine subspeciality?
https://pubmed.ncbi.nlm.nih.gov/35606573/

Pediatric Neurology
Cerebral autoregulation in healthy term newborns: brief report
https://pubmed.ncbi.nlm.nih.gov/35961056/
Imaging findings in neonatal and pediatric posterior reversible encephalopathy syndrome (PRES) differ from adults
https://pubmed.ncbi.nlm.nih.gov/35963074/

Obstetrics and Gynecology
No new articles

American Journal of Obstetrics & Gynecology
Neurodevelopment at 5 years of age for preterm-born children according to mode of conception: a cohort study
https://pubmed.ncbi.nlm.nih.gov/35671779/

Long-term neurodevelopmental outcome in children after antenatal intravenous immune globulin treatment in fetal and neonatal alloimmune thrombocytopenia
https://pubmed.ncbi.nlm.nih.gov/35671780/

Hospital Pediatrics
Early weight loss percentile curves and feeding practices in opioid-exposed infants
https://pubmed.ncbi.nlm.nih.gov/36073203/
Comparison of early-onset sepsis risk-stratification algorithms in neonates in a Kenyan nursery
https://pubmed.ncbi.nlm.nih.gov/36127311/

BASIC SCIENCE SELECTION
Decoding the IGF1 signaling gene regulatory network behind alveologenesis from a mouse model of bronchopulmonary dysplasia
Feng Gao, Changgong Li, Susan M Smith, et al. *Elife.*
https://www.ncbi.nlm.nih.gov/pubmed/36214448

Mesenchymal stem cell bioenergetics and apoptosis are associated with risk for bronchopulmonary dysplasia in extremely low birth weight infants
Snehashis Hazra, Rui Li, Bianca M Vamesu, et al. *Sci Rep.*
https://www.ncbi.nlm.nih.gov/pubmed/36261501

A hydrogen-sulfide derivative of mesalamine reduces the severity of intestinal and lung injury in necrotizing enterocolitis through endothelial nitric oxide synthase
Brian D Hosfield, Chelsea E Hunter, Hongge Li, et al. *Am J Physiol Regul Integr Comp Physiol.*
https://www.ncbi.nlm.nih.gov/pubmed/35912999

Age disparities in intestinal stem cell quantities: a possible explanation for preterm infant susceptibility to necrotizing enterocolitis
Brian D Hosfield, W Christopher Shelley, Fikir M Mesfin, et al. *Pediatr Surg Int.*
https://www.ncbi.nlm.nih.gov/pubmed/36208323

Serotonin-deficient neonatal mice are not protected against the development of experimental bronchopulmonary dysplasia or pulmonary hypertension
Danielle S Roberts, Laura G Sherlock, Janelle N Posey, et al. *Physiol Rep*.
https://www.ncbi.nlm.nih.gov/pubmed/36200294

Ultra-high temperature treatment and storage of infant formula induces dietary protein modifications, gut dysfunction, and inflammation in preterm pigs
Jing Sun, Halise Gül Akıllıoğlu, Karoline Aasmul-Olsen, et al. *Mol Nutr Food Res.*
https://www.ncbi.nlm.nih.gov/pubmed/36052940

Butyrate induces development-dependent necrotizing enterocolitis-like intestinal epithelial injury via necroptosis
Kewei Wang, Guo-Zhong Tao, Fereshteh Salimi-Jazi, et al. *Pediatr Res.*
https://www.ncbi.nlm.nih.gov/pubmed/36202969

Clinical
The effects of breastfeeding and breast milk taste or smell on mitigating painful procedures in newborns: systematic review and meta-analysis of randomized controlled trials
Zühal Çamur and Çiğdem Erdoğan. *Breastfeed Med.*
https://www.ncbi.nlm.nih.gov/pubmed/36126292

Risk factors for unfavorable outcome at discharge of newborns with hypoxic-ischemic encephalopathy in the era of hypothermia
Thierry Debillon, Loïc Sentilhes, Gilles Kayem, et al. *Pediatr Res.*
https://www.ncbi.nlm.nih.gov/pubmed/36272997

Association between duration of early empiric antibiotics and necrotizing enterocolitis and late-onset sepsis in preterm infants: a multicenter cohort study
Thomas H Dierikx, Nancy Deianova, Jip Groen, et al. *Eur J Pediatr.*
https://www.ncbi.nlm.nih.gov/pubmed/35927379

Point-of-care ultrasound (POCUS) protocol for systematic assessment of the crashing neonate-expert consensus statement of the international crashing neonate working group
Yasser Elsayed, Muzafar Gani Abdul Wahab, Adel Mohamed, et al. *Eur J Pediatr.*
https://www.ncbi.nlm.nih.gov/pubmed/36239816

Visitor restriction during the COVID-19 pandemic did not impact rates of Staphylococcus aureus colonization in the NICU patients
Hailey Zie Evans, Sean Bailey, Sourabh Verma, et al. *J Perinat Med.*
https://www.ncbi.nlm.nih.gov/pubmed/36190160

The effects of kangaroo mother care and music listening on physiological parameters, oxygen saturation, crying, awake state and sleep in infants in NICU
Grażyna Gebuza, Marzena Kaźmierczak, Katarzyna Leńska, et al. *J Matern Fetal Neonatal Med.*
https://www.ncbi.nlm.nih.gov/pubmed/33081550

Secretory immunoglobulin A in preterm infants: determination of normal values in breast milk and stool
Claire L Granger, Christopher A Lamb, Nicholas D Embleton, et al. *Pediatr Res.*
https://www.ncbi.nlm.nih.gov/pubmed/34952939

Cannabis use during lactation may alter the composition of human breast milk
Chitmandeep Josan, Samantha Shiplo, Gerhard Fusch, et al. *Pediatr Res.*
https://www.ncbi.nlm.nih.gov/pubmed/36195631

Pulmonary hypertension in preterm infants treated with laser vs anti-vascular endothelial growth factor therapy for retinopathy of prematurity
Christopher R Nitkin, Nicolas A Bamat, Joanne Lagatta, et al. *JAMA Ophthalmol.*
https://www.ncbi.nlm.nih.gov/pubmed/36201183

Development of necrotizing enterocolitis after blood transfusion in very premature neonates
Travis L Odom, Jessica Eubanks, Nusiebeh Redpath, et al. *World J Pediatr.*
https://www.ncbi.nlm.nih.gov/pubmed/36227506

Comparison of adverse events between intravitreal anti-VEGF and laser photocoagulation for treatment-requiring retinopathy of prematurity: a systematic review
Georgios N Tsiropoulos, Aikaterini K Seliniotaki, Anna-Bettina Haidich, et al. *Int Ophthalmol.*
https://www.ncbi.nlm.nih.gov/pubmed/36214992

Blood products transfusion and retinopathy of prematurity: A cohort study
Jose Uberos, Elisabeth Fernandez-Marin, Ana Campos-Martínez, et al. *Acta Ophthalmol.*
https://www.ncbi.nlm.nih.gov/pubmed/36217834