Publications Working Group

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Section on Neonatal-Perinatal Medicine

ARTICLES OF INTEREST – December 2024

<u>Cost-effectiveness of maternal vaccination to prevent respiratory syncytial virus illness</u> David W Hutton, Lisa A Prosser, Angela M Rose, et al. Pediatrics.

This study simulated RSV infection and disease with and without seasonal maternal RSV vaccination (RSVpreF) in half of the pregnant persons in the annual US birth cohort during weeks 32 through 36 of gestation. The authors determined that year-round maternal vaccination with RSVpreF would prevent 45,693 outpatient visits, 15,866 ED visits, and 7,571 hospitalizations among infants each year. Vaccination had a societal incremental cost of \$396 280 per quality-adjusted life-year (QALY) saved. Vaccination from September through January cost \$163,513 per QALY saved. The most influential inputs were QALYs lost from RSV disease, the cost of the vaccine, and RSV-associated hospitalization costs; changes in these inputs yielded outcomes ranging from cost-saving to \$800,000 per QALY saved.

<u>Cost-effectiveness of Nirsevimab for respiratory syncytial virus in infants and young children</u>

David W Hutton, Lisa A Prosser, Angela M Rose, et al. Pediatrics.

This study simulated healthcare utilization and deaths from RSV with and without nirsevimab among infants aged 0 to 7 months and those 8 to 19 months old over a single RSV season. The authors estimated that 107,253 outpatient visits, 38,204 emergency department visits, and 14,341 hospitalizations could be averted each year if half of the US birth cohort received nirsevimab. This would cost \$153,517 per quality-adjusted life year (QALY) saved. Nirsevimab in the second season for children facing a 10-fold higher risk of hospitalization would cost \$308,468 per QALY saved. Sensitivity analyses showed RSV hospitalization costs, nirsevimab cost, and QALYs lost from RSV disease were the most

influential parameters with cost-effectiveness ratios between cost-saving and \$323,788 per QALY saved.

<u>Correlating severity of pulmonary hypertension by echocardiogram with mortality in</u> premature infants with bronchopulmonary dysplasia

Rachel D Torok, Robert A Gardner, Piers C A Barker, et al. Am J Perinatol. Bronchopulmonary dysplasia (BPD) is the most common complication of preterm birth. Infants with BPD are at increased risk for pulmonary hypertension (PH). The authors sought to use predefined criteria to diagnose PH by echocardiogram and relate PH severity to mortality in extremely premature infants with BPD. Echocardiograms from 46 infants born ≤28 weeks' postmenstrual age with a diagnosis of BPD were assessed for PH by three pediatric cardiologists using predefined criteria, and survival times among categories of PH patients were compared. The authors found that using predefined criteria for PH, premature infants with BPD can be stratified into PH severity categories and that patients diagnosed with severe PH

by echocardiogram have significantly reduced survival.

Therapeutic hypothermia for neonatal hypoxic–ischemic encephalopathy: reducing variability in practice through a collaborative telemedicine initiative Danieli M K Leandro, Gabriel F T Variane, Alex Dahlen, et al. Am J Perinatol.

This prospective study aimed to assess the viability of implementing a tele-educational training program in neurocritical care for newborns diagnosed with hypoxic-ischemic encephalopathy (HIE) and treated with therapeutic hypothermia (TH), with the goal of reducing practice variation. An educational intervention consisting of 12 biweekly, 1-hour, live videoconferences was implemented during a 6-month period in all centers. The primary outcome was the rate of deviations from TH protocol, and it was evaluated during a 3-month period before and after the intervention. The authors conclude that implementing a tele-educational program in neonatal neurocritical care is feasible and may decrease variability in the delivery of care to patients with HIE treated with TH.

Eclipta prostrata improves alveolar development of bronchopulmonary dysplasia via suppressing the NLRP3 inflammasome in a DLD-dependent manner Xiaoyan Zheng, Zhen Tan, Danying Zhu, et al. Pediatr Pulmonol.

This study aims to investigate whether Eclipta prostrata (EAP) could improve the lung development of BPD by suppressing the lung inflammatory response. Changes in the NOD-, LRR- and pyrin domain-containing 3 (NLRP3) inflammasome and pyroptosis were assessed by treatment with EAP. The effect of EAP on the NLRP3 inflammasome was tested in vitro using the THP-1 cell line and primary alveolar macrophages. Histopathological and immunofluorescence results of lung tissues revealed that lipopolysaccharide (LPS) and hyperoxia induced lung injury and triggered NLRP3 inflammasome activation and pyroptosis in alveolar macrophages. EAP ameliorated

BPD lung injury, inhibited NLRP3 inflammasome activation and reduced gasdermin D (GSDMD) expression in alveolar macrophages. EAP downregulated the expression of NLRP3 inflammasome pathway molecules (NLRP3, caspase-1, and IL-1beta) and GSDMD in LPS-stimulated THP-1 macrophages and primary alveolar macrophages. This study suggested that EAP could attenuate arrest of alveolar development via inhibiting NLRP3 inflammasome in a DLD-dependent way, and could be a potential therapeutic method for BPD.

Estrogen alleviates oxidative bowel injury and neuroinflammation in necrotizing Enterocolitis

Kıvılcım Karadeniz Cerit, Türkan Koyuncuoğlu, Beyza Akcan, et al. J Surg Res.

This study aimed to elucidate the potential therapeutic effect of estrogen receptor agonists on NEC-induced intestinal and brain injury in rats. NEC rats received either vehicle, estrogen receptor alpha (ERalpha) agonist propyl pyrazole triol (1 mg/kg/day), ERbeta agonist diarylpropionitrile (1 mg/kg/day), or 17beta-estradiol (1 mg/kg/day) during maternal separation. Elevation in proinflammatory cytokines, apoptosis, and microscopically and biochemically evident oxidative injury in both the intestinal and brain tissues were observed in NEC-induced pups. In both the intestinal and brain tissues, nerve growth factor and brain-derived neurotrophic factor protein levels were depleted, expressions of both the ESR1 and ESR2 genes were downregulated, while treatment with 17beta-estradiol or ER agonists alleviated extent of oxidative injury of the intestines and brain tissue, upregulated nerve growth factor, brain-derived neurotrophic factor, and ER gene expressions, abolished NEC-induced decrease in claudin-3 expression, increased the survival rates, improved the clinical states of the survived pups at varying degrees. Activation of estrogen signaling by receptor agonists alleviated NEC-induced intestinal and cerebral injury, implicating that estrogen agonists could be regarded as promising preventive/therapeutic agents for NEC.

Initial surgery for spontaneous intestinal perforation in extremely low birth weight infants is notassociated with mortality or in-hospital morbidities

Amy B Hair, Kevin M Sullivan, Irfan Ahmad, et al. J Perinatol.

This study uses data from the Children's Hospitals Neonatal Database to determine shortterm outcomes following peritoneal drain (PD), laparotomy (LAP) after PD (PD-LAP), and LAP in extremely low birth weight (ELBW) infants with spontaneous intestinal perforation (SIP). The study included ELBW infants with SIP managed at units participating in the Children's Hospitals Neonatal Consortium between 2010 to 2016. Of 729 infants with SIP, 383 (53%) received PD, 61(8%) PD-LAP, and 285(39%) LAP. PD infants had lower GA at birth, at SIP diagnosis and upon admission than PD-LAP or LAP; and higher sepsis rates than LAP. Bivariate analysis and Kaplan-Meier survival estimates suggested PD had increased mortality vs. PD-LAP and LAP (27%, 11.5%, and 15.8% respectively, p < 0.001). However, surgical approach was not significantly associated with mortality in multivariable analysis accounting for GA and illness

severity. Length of stay did not differ by surgical approach. The data from this study suggests

that in ELBW infants with SIP, mortality, and LOS are independent of the initial surgical approach.

Surfactant treatment at birth in a contemporary cohort of preterm infants with bronchopulmonary Dysplasia

Clifford Mueller, Edward G Shepherd, Matthew J Kielt, et al. J Perinatol.

This is an observation study from the BPD collaborative examining a contemporary cohort of BPD patients if surfactant use was associated with BPD severity. This tudy is relevant as there is lack of data regarding the effect of surfactant on incidence of BPD and BPD severity in a more recent cohort of patients as the use of non-invasive respiratory support has increased the use of surfactant has decreased. 971 infants with BPD met entry criteria, 864 (89%) had received surfactant in the first 72 h of life and the remainder had not. There was an association between surfactant and BPD grade, with a greater likelihood of grade 3 BPD in infants who received should be interpreted with caution, while the results of this study suggest that DR or multiple of surfactant may be associated with severe grades of BPD, it does not suggest causality. Receipt of surfactant in DR or multiple doses may reflect the impact of perinatal factors beyond immaturity alone that increase the risk for grade 3 BPD.

OTHER NOTEWORTHY PUBLICATIONS – December 2024

Pediatrics

Cost-effectiveness of nirsevimab for respiratory syncytial virus in infants and young children

https://pubmed.ncbi.nlm.nih.gov/39582316

Cost-effectiveness of maternal vaccination to prevent respiratory syncytial virus illness <u>https://pubmed.ncbi.nlm.nih.gov/39582303</u>

Parent perspectives on nirsevimab for their newborn

https://pubmed.ncbi.nlm.nih.gov/39587878

Hepatitis C virus testing among perinatally exposed children: 2018 to 2020

https://pubmed.ncbi.nlm.nih.gov/39544019

Mothers falling asleep during infant feeding

https://pubmed.ncbi.nlm.nih.gov/39483051

Sleep-related sudden unexpected infant death among infants prenatally substance exposed

https://pubmed.ncbi.nlm.nih.gov/39558749

Disparities in survival without major morbidity among very low birth weight infants in California

https://pubmed.ncbi.nlm.nih.gov/39574223

Multidimensional and longitudinal impact of a genetic diagnosis for critically ill infants <u>https://pubmed.ncbi.nlm.nih.gov/39512073</u> Executive function in children born moderate-to-late preterm: a meta-analysis <u>https://pubmed.ncbi.nlm.nih.gov/39568341</u>

Journal of Pediatrics

New technologies bring new questions in perinatal HSV

https://www.jpeds.com/article/s0022-3476(24)00456-6/pdf

Substantiating the need for NICU "follow through"

https://www.jpeds.com/article/s0022-3476(24)00457-8/pdf

The emperor has no clothes: c-reactive protein for early-onset sepsis

https://pubmed.ncbi.nlm.nih.gov/39178941/

Recommitting to rules of evidence and laws of inference

https://pubmed.ncbi.nlm.nih.gov/39032771/

Integrated lung ultrasound and targeted neonatal echocardiography evaluation in infants born preterm

https://pubmed.ncbi.nlm.nih.gov/39032769/

Intubation and lower saturation in the delivery room are associated with balloon atrial septostomy in neonates with transposition of the great arteries

https://pubmed.ncbi.nlm.nih.gov/39097264/

Does catch-up growth come with a cognitive cost? cognitive outcome and growth patterns in growth discordant identical twins

https://pubmed.ncbi.nlm.nih.gov/39097263/

Use and waste of reconstituted whole blood exchange transfusions: an 11-year national observational study

https://pubmed.ncbi.nlm.nih.gov/39095011/

Motivations for and against participation in neonatal research: insights from interviews of diverse parents approached for neonatal research in the united states https://pubmed.ncbi.nlm.nih.gov/38492913/

Parental report of indoor air pollution is associated with respiratory morbidities in bronchopulmonary dysplasia

https://pubmed.ncbi.nlm.nih.gov/39151604/

Advantages of a data-capture system with video to record neonatal resuscitation interventions

https://pubmed.ncbi.nlm.nih.gov/39151599/

Risk assessment of cognitive impairment at 2 years of age in infants born extremely preterm using the intergrowth-21st growth standards

https://pubmed.ncbi.nlm.nih.gov/39168179/

Etiology, characteristics, and outcomes of neonatal liver failure: lessons learned over the last 3 decades

https://pubmed.ncbi.nlm.nih.gov/39151605/

Congenital hypothyroidism and school achievement in adolescence: a population-based sibling control study

https://pubmed.ncbi.nlm.nih.gov/39151600/

Effects of early enteral to parenteral protein ratios on brain volume and somatic growth in very low birth weight infants

https://pubmed.ncbi.nlm.nih.gov/39181317/

Neonatal risk factors for pulmonary vein stenosis in infants born preterm with severe bronchopulmonary dysplasia

https://pubmed.ncbi.nlm.nih.gov/39181320/

Esophageal atresia with tracheoesophageal fistula is associated with consanguinity <u>https://pubmed.ncbi.nlm.nih.gov/39151598/</u>

Mucosal site detection of herpes simplex virus in neonates

https://pubmed.ncbi.nlm.nih.gov/39059717/

Cryptic congenital malaria infection causing fever of unknown origin in an infant https://pubmed.ncbi.nlm.nih.gov/39151606/

Benign ocular flutter

https://pubmed.ncbi.nlm.nih.gov/39178940/

Pediatric Research

December issue not released

Archives of Disease in Childhood - Fetal & Neonatal Edition

No new articles

Journal of Perinatology

Opioid equipotency conversions for hospitalized infants: a systematic review https://pubmed.ncbi.nlm.nih.gov/3930473

"WISER" intervention to reduce healthcare worker burnout – 1 year follow up <u>https://pubmed.ncbi.nlm.nih.gov/38734802</u>

Systemic racism and Non-Hispanic Black to Non-Hispanic White disparities in infant mortality at the county level

https://pubmed.ncbi.nlm.nih.gov/39014009

Social needs and healthcare utilization in NICU graduates

https://pubmed.ncbi.nlm.nih.gov/39271917

Quality of couple relationship and associated factors in parents of NICU-cared infants during the first year after birth

https://pubmed.ncbi.nlm.nih.gov/39097668

Initial surgery for spontaneous intestinal perforation in extremely low birth weight infants is not associated with mortality or in-hospital morbidities

https://pubmed.ncbi.nlm.nih.gov/38992239

Molecular testing for gastrointestinal pathogens in intestinal tissue of infants with necrotizing

enterocolitis or spontaneous intestinal perforation

https://pubmed.ncbi.nlm.nih.gov/38849546

Maternal, neonatal, and nutritional risk factors for medical and surgical necrotizing enterocolitis

https://pubmed.ncbi.nlm.nih.gov/39030319

Blood absolute monocyte count trends in preterm infants with suspected necrotizing enterocolitis: an adjunct tool for diagnosis?

https://pubmed.ncbi.nlm.nih.gov/39090351

Timing and risk factors associated with acute kidney injury in infants with necrotizing enterocolitis

https://pubmed.ncbi.nlm.nih.gov/38778205

Use of urine neutrophil gelatinase-associated lipocalin for nephrotoxic medication acute kidney

injury screening in neonates

https://pubmed.ncbi.nlm.nih.gov/38514742

Post-natal steroid exposure in very low birthweight neonates and associations with acute kidney injury

https://pubmed.ncbi.nlm.nih.gov/38783049

Neonatal CSF glucose measured by blood gas analyzer, glucometer, and standard laboratory methods

https://pubmed.ncbi.nlm.nih.gov/39227477

Blood volume collected for cultures in infants with suspected neonatal sepsis <u>https://pubmed.ncbi.nlm.nih.gov/39341980</u>

Time to positivity of blood cultures in a level IV NICU varies based on organism category and population subgroups: is a 36-hour rule out safe?

https://pubmed.ncbi.nlm.nih.gov/38902516

Predictors of mortality and severe illness from Escherichia coli sepsis in neonates <u>https://pubmed.ncbi.nlm.nih.gov/39266664</u>

Epidemiology and outcomes of bacterial meningitis in the neonatal intensive care unit https://pubmed.ncbi.nlm.nih.gov/39060554

Surfactant treatment at birth in a contemporary cohort of preterm infants with bronchopulmonary dysplasia

https://pubmed.ncbi.nlm.nih.gov/39020028

Childhood outcomes following discharge from a referral bronchopulmonary dysplasia program

https://pubmed.ncbi.nlm.nih.gov/38937610

Reporting nasal pressure injuries in neonates receiving non-invasive ventilation: a scoping review

https://pubmed.ncbi.nlm.nih.gov/39289554

Decreasing respiratory device-related pressure injuries in the NICU using 3D printed barrier templates

https://pubmed.ncbi.nlm.nih.gov/38267635

The NICU tracheostomy team: multidisciplinary collaboration for improvement in survival of complex patients

https://pubmed.ncbi.nlm.nih.gov/38914748

Advocating for the inclusion of kidney health outcomes in neonatal research: best practice recommendations by the Neonatal Kidney Collaborative

https://pubmed.ncbi.nlm.nih.gov/38969825

Neonatology

Blinding assessments in neonatal ventilation meta-analyses: a systematic metaepidemiological review

https://pubmed.ncbi.nlm.nih.gov/38861954

Relationship between neonatal cerebral fuels and neurosensory outcomes at 3 years in well

babies: follow-up of the glucose in well babies (GLOW) study

https://pubmed.ncbi.nlm.nih.gov/38631297

Long-term pulmonary and neurodevelopmental outcomes of meconium aspiration syndrome

affected infants: a retrospective national population-based study in Taiwan https://pubmed.ncbi.nlm.nih.gov/38797163

Blood lactate levels during therapeutic hypothermia and neurodevelopmental outcome or death at 18–24 months of age in neonates with moderate and severe hypoxic-ischemic encephalopathy

https://pubmed.ncbi.nlm.nih.gov/38852586

Epidemiology and outcomes of neonatal sepsis: experience from a tertiary Australian Nicu <u>https://pubmed.ncbi.nlm.nih.gov/38889701</u>

Air or oxygen for infant resuscitation: a prospective cohort study of moderate-late preterm infants requiring delivery room resuscitation

https://pubmed.ncbi.nlm.nih.gov/38889702

Severe bronchopulmonary dysplasia adversely affects brain growth in preterm infants <u>https://pubmed.ncbi.nlm.nih.gov/38648742</u>

Skin transillumination improves peripheral vein cannulation by residents in neonates: a randomized controlled trial

https://pubmed.ncbi.nlm.nih.gov/38754396

The prevalence and spontaneous closure of ventricular septal defects the first year of life https://pubmed.ncbi.nlm.nih.gov/38857582

End-of-life care for newborn infants: a multicenter real-life prospective study https://pubmed.ncbi.nlm.nih.gov/38801819

Late-onset sepsis among extremely preterm infants of 24–28 weeks gestation: an international comparison in 10 high-income countries

https://pubmed.ncbi.nlm.nih.gov/38889700

Laryngeal mask airway in neonatal resuscitation: a survey of the union of European neonatal

and perinatal societies

https://pubmed.ncbi.nlm.nih.gov/38834044

American Journal of Perinatology

Targeted neonatal echocardiography: basics of knobology 101 https://pubmed.ncbi.nlm.nih.gov/38503304/

Treatment for neonatal abstinence syndrome using nonpharmacological interventions https://pubmed.ncbi.nlm.nih.gov/38729163/

Identifying chatgpt-written patient education materials using text analysis and readability https://pubmed.ncbi.nlm.nih.gov/38593984/

The diagnostic yield of chromosomal microarray analysis in third-trimester fetal abnormalities <u>https://pubmed.ncbi.nlm.nih.gov/38688298/</u>

Antenatal breast milk expression survey of individuals whose pregnancy was complicated by diabetes: exploring knowledge, perceptions, experiences, and milk volume expressed https://pubmed.ncbi.nlm.nih.gov/38723640/

Postpartum hemorrhage after vaginal delivery is associated with a decrease in immediate breastfeeding success

https://pubmed.ncbi.nlm.nih.gov/38802080/

The impact on birth outcomes of sonographic fetal weight estimation in neonatal macrosomia <u>https://pubmed.ncbi.nlm.nih.gov/38698595/</u>

Defining an evaluation protocol for the infant with fetal echogenic bowel https://pubmed.ncbi.nlm.nih.gov/38631388/

Association between neonatal outcomes and admission hypothermia among very preterm infants in chinese neonatal intensive care units: a multicenter cohort study https://pubmed.ncbi.nlm.nih.gov/38802079/

Critical organ dysfunction and preoperative mortality in newborns with hypoplastic left heart syndrome https://pubmed.ncbi.nlm.nih.gov/38740366/

Association between gestational age and perinatal outcomes in women with late preterm premature rupture of membranes

https://pubmed.ncbi.nlm.nih.gov/38754462/

Journal of Neonatal-Perinatal Medicine

No new content

Maternal Health, Neonatology and Perinatology

Diploid fetus with partially triploid placenta: case presentation and management strategy https://mhnpjournal.biomedcentral.com/counter/pdf/10.1186/s40748-024-00195-3.pdf **Neoreviews**

Depressed skull fracture in infants: the role of vacuum-assisted intervention https://pubmed.ncbi.nlm.nih.gov/39616143

Beyond prostaglandin E1: management of infants with critical congenital heart defects <u>https://pubmed.ncbi.nlm.nih.gov/39616144</u>

Robin sequence: neonatal management

https://pubmed.ncbi.nlm.nih.gov/39616138

Recurrence risks in congenital anomalies: a comprehensive guide for parental counseling https://pubmed.ncbi.nlm.nih.gov/39616141

Fetal arrhythmia with a myriad of complications

https://pubmed.ncbi.nlm.nih.gov/39616140

Neonatal uterine bleeding in a 6-day-old neonate

https://pubmed.ncbi.nlm.nih.gov/39616137

A preterm infant with an unlucky airway

https://pubmed.ncbi.nlm.nih.gov/39616142

How to use POCUS to place umbilical lines

https://pubmed.ncbi.nlm.nih.gov/39616139

Recognition and impact of policing families in the neonatal intensive care unit <u>https://pubmed.ncbi.nlm.nih.gov/39616136</u>

JAMA Pediatrics

When biological causality is determined in a court of law

https://pubmed.ncbi.nlm.nih.gov/39374031/

Antibiotic shortage during a public health crisis—the perfect storm

https://pubmed.ncbi.nlm.nih.gov/39466281/

Prenatal cannabis exposure—an intergenerational risk marker for neurodevelopment https://pubmed.ncbi.nlm.nih.gov/39466262/

Optimizing public policies for pregnancy and infant outcomes optimizing public policies for pregnancy and infant outcomes

https://pubmed.ncbi.nlm.nih.gov/39401052/

Prenatal cannabis exposure and executive function and aggressive behavior at age 5 years https://pubmed.ncbi.nlm.nih.gov/39466284/

Tenant right-to-counsel and adverse birth outcomes in New York, New York <u>https://pubmed.ncbi.nlm.nih.gov/39466257/</u>

State social expenditures and preterm birth and low birth weight in the US https://pubmed.ncbi.nlm.nih.gov/39401047/

National trends in infant mortality in the US after Dobbs

https://pubmed.ncbi.nlm.nih.gov/39432283/

BMC Pediatrics

Risk factors and nomogram for the prediction of intracranial hemorrhage in very preterm infants

https://pubmed.ncbi.nlm.nih.gov/39633312/

Factors associated with the admission of moderate to late preterm and term neonates within 72 hours of birth at Dedza and Mangochi District Hospitals, Malawi: a matched case-control study

https://pubmed.ncbi.nlm.nih.gov/39633347/

Untargeted metabolomics analysis of glycerophospholipid metabolism in very low birth weight infants administered multiple oil lipid emulsions

https://pubmed.ncbi.nlm.nih.gov/39736612/

Brain development using a multicomponent intravenous lipid emulsion in preterm infants <u>https://pubmed.ncbi.nlm.nih.gov/39736580/</u>

Prevalence and risk factors associated with birth asphyxia among neonates delivered in China: a systematic review and meta-analysis

https://pubmed.ncbi.nlm.nih.gov/39732647/

CCL3 as a novel biomarker in the diagnosis of necrotizing enterocolitis https://pubmed.ncbi.nlm.nih.gov/39732631/

Feasibility of the use of Kangaroo mother care in the transfer of preterm and low-birthweight infants: a two-arm nonrandomized controlled cluster feasibility study of neonatal transport in Cape Coast, Ghana

https://pubmed.ncbi.nlm.nih.gov/39732693/ Lung recruitment with HFOV versus VTV/AC in preterm infants with RDS

https://pubmed.ncbi.nlm.nih.gov/39716121/

Pediatric Critical Care Medicine

Nuclear medicine cerebral perfusion studies as an ancillary test to support evaluation of brain death/death by neurologic criteria: single-center experience in infants, 2005–2022 <u>https://pubmed.ncbi.nlm.nih.gov/39630065/</u>

New England Journal of Medicine

No relevant articles

Lancet No relevant articles

JAMA

Intratracheal budesonide mixed with surfactant for extremely preterm infants: the pluss randomized clinical trial

https://pubmed.ncbi.nlm.nih.gov/39527075/

BMJ

No relevant articles

Pediatric Infectious Disease Journal

Acyclovir dosing practices across a multicenter cohort of neonatal intensive care units https://pubmed.ncbi.nlm.nih.gov/38920385/

Beyond early- and late-onset neonatal sepsis definitions: what are the current causes of neonatal sepsis globally? a systematic review and meta-analysis of the evidence https://pubmed.ncbi.nlm.nih.gov/39264197/

Concordance of cytomegalovirus saliva and urine testing in infants for the detection of congenital infection

https://pubmed.ncbi.nlm.nih.gov/39105512/

An unusual high prevalence of cryptococcus (naganishia) diffluens colonization in neonates hospitalized in a referral neonatal intensive care unit https://pubmed.ncbi.nlm.nih.gov/39105514/

Brain abnormalities, neurodevelopmental milestones, and long-term follow-up in newborns with

congenital cytomegalovirus identified through a neonatal screening program https://journals.lww.com/pidj/fulltext/2024/12000/an_unusual_high_prevalence_of_crypt ococcus.17.a

spx

Pediatric Cardiology

A challenging interventional procedure: transcatheter closure of tubular patent ductus arteriosus in patients with pulmonary hypertension

https://pubmed.ncbi.nlm.nih.gov/37474608/

Impact of residual lesion severity on neurodevelopmental outcomes following congenital heart surgery in infancy and childhood

https://pubmed.ncbi.nlm.nih.gov/37543999/

Patterns of electrocardiographic abnormalities in children with hypertrophic cardiomyopathy <u>https://pubmed.ncbi.nlm.nih.gov/37684488/</u>

Tricuspid valve repair can restore the prognosis of patients with hypoplastic left heart syndrome and tricuspid valve regurgitation: a meta-analysis

https://pubmed.ncbi.nlm.nih.gov/37555970/

Prenatal diagnosis rate of critical congenital heart disease remains inadequate with significant racial/ethnic and socioeconomic disparities and technical barriers https://pubmed.ncbi.nlm.nih.gov/37648785/

Outcomes of infant supraventricular tachycardia management without medication <u>https://pubmed.ncbi.nlm.nih.gov/37563317/</u>

Early-onset fetal growth restriction increases left ventricular sphericity in adolescents born very preterm https://pubmed.ncbi.nlm.nih.gov/37596421/

Infective endocarditis at a referral children's hospital during 19-year period: trends and outcomes <u>https://pubmed.ncbi.nlm.nih.gov/37610636/</u>

Augmented reality visualization of 3d rotational angiography in congenital heart disease: a comparative study to standard computer visualization

https://pubmed.ncbi.nlm.nih.gov/37725124/

Continuous prostanoid initiation in severe pulmonary hypertension in the pediatric cardiac intensive care unit

https://pubmed.ncbi.nlm.nih.gov/37698701/

Perinatal outcomes of fetuses with prenatally diagnosed atrial appendage aneurysm https://pubmed.ncbi.nlm.nih.gov/37665339/

Assessment of vascular indices by abdominal aortic ultrasonography in preterm neonates with bronchopulmonary dysplasia

https://pubmed.ncbi.nlm.nih.gov/37690064/

Is it diabetes or just macrosomia? fetal myocardial performance index in large-forgestational age fetuses

https://pubmed.ncbi.nlm.nih.gov/38907872/

A case of successful biventricular repair of the transposition of the great arteries with a coronary anomaly associated with an atrioventricular septal defect <u>https://pubmed.ncbi.nlm.nih.gov/37624408/</u>

Prenatally diagnosed interventricular septal aneurysm with associated ventricular dysfunction <u>https://pubmed.ncbi.nlm.nih.gov/37730881/</u>

Pediatric Neurology

The genetic puzzle of cerebral palsy: results of a monocentric study https://pubmed.ncbi.nlm.nih.gov/39213953/

Adequacy of an in–neonatal intensive care unit 1t magnetic resonance imaging compared with 3t magnetic resonance imaging for clinical management

https://pubmed.ncbi.nlm.nih.gov/39255540/

Identification of putative biomarkers in cerebral palsy: a meta-analysis and meta-regression <u>https://pubmed.ncbi.nlm.nih.gov/39265434/</u>

Early biomarkers in the prediction of later functional impairment in preterm children with cerebral palsy <u>https://pubmed.ncbi.nlm.nih.gov/39276578/</u>

Life after neonatal seizures: characterizing the longitudinal parent experience https://pubmed.ncbi.nlm.nih.gov/39317023/

A comparison of treatment practices for newborn seizure management across level ii and iii neonatal intensive care units in the united states

https://pubmed.ncbi.nlm.nih.gov/39368245/

Helmet therapy for positional plagiocephaly: a systematic review of the tools used to diagnose, offer treatment recommendations, and assess treatment outcomes of the condition <u>https://pubmed.ncbi.nlm.nih.gov/39368248/</u>

Rare ccnd2 (p.thr280ile) variant associated with infantile spasms in a patient with megalencephaly-polymicrogyria-polydactyly-hydrocephalus syndrome https://pubmed.ncbi.nlm.nih.gov/39395260/

Adjuvant high-dose erythropoietin with delayed therapeutic hypothermia in neonatal hypoxic-ischemic encephalopathy

https://pubmed.ncbi.nlm.nih.gov/39481349/

Bilateral mechanical thrombectomy in a child with single-ventricle congenital heart disease and protein-losing enteropathy

https://pubmed.ncbi.nlm.nih.gov/39265433/

Research priorities for children with hypoxic-ischemic encephalopathy or

myelomeningocele: a survey of parents

https://pubmed.ncbi.nlm.nih.gov/39276579/

A novel question prompt list for parents of neonates with seizures <u>https://pubmed.ncbi.nlm.nih.gov/39288660/</u>

Cerebrovascular injury from early-onset neonatal escherichia coli meningitis: expanding the clinical-radiologic phenotype

https://pubmed.ncbi.nlm.nih.gov/39388736/

Obstetrics and Gynecology

Betamethasone exposure and neonatal respiratory morbidity among late preterm births by planned mode of delivery and gestational age

https://pubmed.ncbi.nlm.nih.gov/39388700/

Sexual orientation-related disparities in neonatal outcomes

https://pubmed.ncbi.nlm.nih.gov/39361956/

American Journal of Obstetrics & Gynecology

Uptake of the respiratory syncytial virus (RSV) vaccine and nirsevimab among pregnant patients and their neonates https://www.ajog.org/article/s0002-9378(24)00951-7/abstract

Group b streptococcus (GBS) colonization and risk for preterm delivery in high-risk pregnancies with cervical cerclage

https://www.ajog.org/article/s0002-9378(24)00968-2/abstract

Hospital Pediatrics

Extravasation Identification and Management in Neonates and Pediatrics: A Cross Sectional Survey <u>https://pubmed.ncbi.nlm.nih.gov/39533873/</u> Nirsevimab Administration During the Birth Hospitalization <u>https://pubmed.ncbi.nlm.nih.gov/39539134/</u>

BASIC SCIENCE SELECTIONS

Analysis of fibroblast growth factor 2 impact and mechanism on bronchopulmonary dysplasia

https://www.ncbi.nlm.nih.gov/pubmed/39694023

LncRNA MIAT binding to GATA3 activates MAPK signaling pathway and influences bronchopulmonary dysplasia

https://www.ncbi.nlm.nih.gov/pubmed/39626812

Eclipta prostrata improves alveolar development of bronchopulmonary dysplasia via suppressing the NLRP3 inflammasome in a DLD-dependent manner https://www.ncbi.nlm.nih.gov/pubmed/39115441

Estrogen alleviates oxidative bowel injury and neuroinflammation in necrotizing enterocolitis

https://www.ncbi.nlm.nih.gov/pubmed/39733474

Hypoxia-Inducible Factor-1alpha Modulates the Toll-Like Receptor 4/Nuclear Factor Kappa B Signaling Pathway in Experimental Necrotizing Enterocolitis https://www.ncbi.nlm.nih.gov/pubmed/39719983

REGgamma-mediated Barrier Disruption and NF-kappaB Activation Aggravates Intestinal Inflammation in Necrotizing Enterocolitis

https://www.ncbi.nlm.nih.gov/pubmed/39653983

Intestinal stem cell-derived extracellular vesicles ameliorate necrotizing enterocolitis injury

https://www.ncbi.nlm.nih.gov/pubmed/39645054

Role of angiopoietin-like 4 in neovascularization associated with retinopathy of prematurity

https://www.ncbi.nlm.nih.gov/pubmed/39491782

Other noteworthy articles

Nasal high-flow therapy versus low-flow oxygen therapy post-discharge in infants with bronchopulmonary dysplasia: a retrospective observational study https://www.ncbi.nlm.nih.gov/pubmed/39688348

Clinical outcomes through two years for infants with bronchopulmonary dysplasia and tracheomalacia

https://www.ncbi.nlm.nih.gov/pubmed/39636156

Risk factors and clinical outcomes of pulmonary hypertension associated with bronchopulmonary dysplasia in extremely premature infants: A systematic review and meta-analysis

https://www.ncbi.nlm.nih.gov/pubmed/39177287

Efficacy of melatonin for treatment and prevention of neonatal necrotizing enterocolitis: a systematic review

https://www.ncbi.nlm.nih.gov/pubmed/39708100

Short-term postoperative complications in preterm neonates with surgical necrotizing enterocolitis: a multicenter retrospective cohort study

https://www.ncbi.nlm.nih.gov/pubmed/39706904

Magnesium sulfate and risk of hypoxic-ischemic encephalopathy in a high-risk cohort https://www.ncbi.nlm.nih.gov/pubmed/38580044

Increased risk of autism in extremely preterm children with a history of retinopathy of prematurity

https://www.ncbi.nlm.nih.gov/pubmed/39698790

Outcomes and need for additional interventions after intravitreal bevacizumab for retinopathy of prematurity

https://www.ncbi.nlm.nih.gov/pubmed/39577561