

## EDITOR'S FOCUS

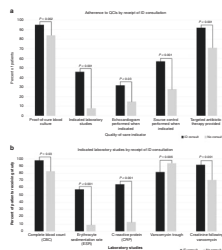
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### EARLY CAREER INVESTIGATOR



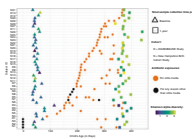
Congratulations to Rakesh Kumar Pilia, the Early Career Investigator for December 2022. Dr Pilia grew up in a small village in Rajasthan, India. After receiving his MBBS in the state medical school, he joined the prestigious Post Graduate Institute of Medical Education and Research in Chandigarh, India, where he completed his basic pediatric residency and subspecialty training in pediatric immunology. Dr. Pilia has already won several awards for his research focusing on neutrophil function in pediatric patients with systemic lupus erythematosus (SLE). As reported in this issue, Dr Pilia and colleagues evaluated phagocytosis and neutrophilic oxidase activity in pediatric SLE patients. They found that phagocytic activity was reduced in these children, implying impaired neutrophil function, and correlated inversely with disease activity. [See pages 1494 and 1535](#)

### INFECTIOUS DISEASES CONSULTATION FOR CHILDREN WITH S. AUREUS BACTEREMIA



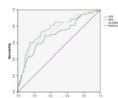
In this quality improvement study, Whittington et al. examined the impact of infectious diseases (ID) consultation for children with *Staphylococcus aureus* bacteremia. The team found that ID consultation led to better adherence to quality control indicators—e.g., performance of echocardiograms—which in some cases resulted in clinical improvement. In their Comment, Pammi and Kaplan reiterate the importance of ID consultation for children with *S. aureus* bacteremia, and support the recommendation that an ID consultation be considered for all these patients. [See pages 1598 and 1502](#)

### IMPACTS OF ANTIBIOTICS ON INFANT GUT MICROBIOTA AND RESISTANCE GENES



In this population study, Lebeaux and colleagues studied the impact of antibiotic exposure on off-target microbes and antibiotic resistance genes, using metagenomic sequencing of stool specimens. They found that, as compared with unexposed infants, off-target microbes and resistance genes were altered. A specific example was noted for infants attending daycare and receiving antibiotics: *Escherichia coli* and resistance genes increased in abundance. In the accompanying Comment, Thorman and Taft highlight the novelty of using the difference-in-differences approach to working with microbiome data in this study. [See pages 1757 and 1500](#)

### WEIGHT AND BLOOD PRESSURE ARE ASSOCIATED WITH EPICARDIAL ADIPOSE TISSUE



In a cross-sectional study, Blancas Sánchez and colleagues evaluated cardiovascular risk factors in elementary and high school students in Spain. They found that thicker epicardial adipose tissue was linked to sex (more predominant in boys), obesity, and hypertension. Future studies are warranted to determine whether intervention could affect these cardiovascular risk factors. [See page 1681](#)

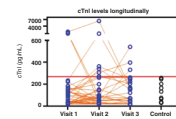
### ASYMMETRIC DIMETHYLARGININE AND HOMOCYSTEINE IN CHILDREN RECEIVING ANTIPILEPTIC DRUGS



Mahmoud et al. evaluated serum levels of asymmetric dimethylarginine (ADMA) and homocysteine, lipid profile, and carotid intima-media thickness in three groups of children

with epilepsy—receiving sodium valproate, levetiracetam, or polytherapy—for more than 6 months. They found that long-term use of antiepileptic drugs (AEDs), especially old-generation polytherapy, elevated lipid profiles, ADMA levels, and carotid intima-media thickness. Newer AEDs had minimal effects. The senior author of the article also presents a Comment describing her work and research. (Photo: Attila Barabas/Getty.) [See pages 1606 and 1504](#)

### CARDIAC TROPONIN I IN PATIENTS WITH DUCHENNE MUSCULAR DYSTROPHY



Sheybani et al. collected serial cardiac troponin I, brain natriuretic peptide, and N-terminal pro-BNP, along with cardiac magnetic resonance data, in children with Duchenne muscular dystrophy. The team found that the serum biomarkers did not correlate with cardiac magnetic resonance indications of cardiomyopathy progression. Transient elevations in troponin I can be seen in asymptomatic patients, and this may be important for monitoring for toxicity in future drug trials. Also in this issue is a family reflections piece on the importance of research and the development of therapies to improve the lives of children with Duchenne muscular dystrophy. [See pages 1613 and 1817](#)

### CARDIAC FUNCTION AFTER PRETERM BIRTH RELATES TO INTRAUTERINE INFLAMMATION



Vrselja et al. evaluated the effect of intrauterine inflammation on preterm-born lambs' cardiac growth and function. They found distinct differences between cardiac myocytes exposed to intrauterine inflammation and those in controls. Antenatal exposure to the inflammation that can accompany preterm birth may have an important effect on neonatal cardiovascular function and health. (Photo: fokkebok/Getty.) [See page 1555](#)

### ACKNOWLEDGEMENTS

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