Special Journal Issue Features Nemours Heart Specialists' Best Practices for Children

Progress in Pediatric Cardiology Highlights Imaging Advances for Diagnosis and Treatment of Congenital Heart Disease

JACKSONVILLE, Fla. (September 9, 2020) – The September issue of *Progress in Pediatric Cardiology* will exclusively feature articles by pediatric cardiologists at Nemours Children's Health System on echocardiography and other cardiac imaging techniques used in the care of children with cardiovascular disease. The 15 original papers and four case studies highlight best practices for imaging to screen, diagnose, and manage congenital heart disease (CHD) and other forms of cardiovascular disease over the entire lifespan to improve patient outcomes.

> *"As children with rare cardiovascular disorders live longer, there is a need for greater awareness of imaging techniques for complex patients to improve the quality of their care."*

CHD affects approximately 1 in 100 children. Many of these conditions are now highly treatable, with research showing that more than 90% of children born today with CHD live into adulthood.

"Cardiovascular disease is a leading cause of morbidity and mortality, and making the diagnosis is critical. Echocardiography is the primary non-invasive tool for assessing cardiac structure and function and can image any patient from fetuses during pregnancy to adults," said **Gul H. Dadlani, MD**, an author on several articles in the issue, and chief of pediatric cardiology at Nemours Children's Hospital in Orlando. "As children with rare cardiovascular disorders live longer, there is a need for greater awareness of imaging techniques for these complex patients to improve the quality of their care."

The issue includes review articles, technical papers on specific uses of echocardiography, case studies of patient illnesses, and discussion on the use of echocardiography in specific disorders, as well as the role of advanced non-invasive cardiac imaging, such as magnetic resonance imaging and computed tomography. Also included are articles highlighting important modifications made during COVID-19. Specific articles of interest, available free, include:

Segmental approach to performing a standard pediatric echocardiogram (Madueme, et al.) describes protocol for a segmental format to improve pediatric cardiac assessment with guidance for capturing imaging in a predictable, consistent ,and reproducible manner to yield accurate information, understanding the need for flexibility and modifications needed when treating pediatric patients.

Cardiovascular screening in Williams syndrome (Dadlani, et al.) details a systematic screening approach for clinicians caring for patients with Williams syndrome, a rare genetic disorder, to use for the detection of cardiovascular disease to help prevent sudden cardiac arrest.

Severe cardiac dysfunction in a patient with multisystem inflammatory syndrome in children (MIS-C), associated with COVID-19: Retrospective diagnosis of a puzzling presentation. A case report (Vari, et al.) reviews key details in the care, diagnosis, and treatment of one of the first U.S. cases of MIS-C. This and subsequent cases at Nemours led to the development of clinical guidelines for the evaluation and care of children with this novel presentation of COVID-19.

The evolution of fetal echocardiography before and during COVID-19 (Nigam, et al.) highlights changes made in fetal echocardiography for screening critical congenital heart disease during the COVID-19 pandemic, and guidance for using a fetal tele-echocardiography approach in the future.

"There are gaps in awareness about how to complete high quality echocardiograms that will allow us to diagnose congenital anomalies that can be life-threatening," said **Shubhika Srivastava, MD**, an author on several articles in the issue, and chief of pediatric cardiology at Nemours/A.I. duPont Hospital for Children in Delaware. "Standardization and continued quality improvement through the review of best practices, like those outlined in the issue, allow for a continuous learning environment leading to consistent approaches, fewer errors and better patient outcomes."

The special issue's articles, authored and co-edited by physicians from Nemours' Cardiac Centers, stem from Nemours' deep expertise in pediatric cardiology. The multi-state health system has world-class Cardiac Centers at its two free-standing children's hospitals with dedicated surgical suites, interventional and electrophysiology labs, cardiac intensive care units, non-invasive imaging exercise physiology labs. The two hospitals are united via a common electronic medical record and imaging systems. Each site has dedicated cardiac surgeons, anesthesiologists, intensivists, interventional cardiologists, electrophysiologists, pediatric cardiologists, cardiac genetics, psychologists, nurse practitioners and nurses committed to providing exceptional cardiac care.

###

About Nemours Children's Health System

Nemours is an internationally recognized children's health system that owns and operates the Nemours/Alfred I. duPont

Hospital for Children in Wilmington, Del., and Nemours Children's Hospital in Orlando, Fla., along with outpatient facilities in five states, delivering pediatric primary, specialty and urgent care. Nemours also powers the world's most-visited website for information on the health of children and teens, KidsHealth.org and offers on-demand, online video patient visits through Nemours CareConnect.

Established as The Nemours Foundation through the legacy and philanthropy of Alfred I. duPont, Nemours provides pediatric clinical care, research, education, advocacy, and prevention programs to families in the communities it serves.

For further information: Karen Bengston, (302) 293-4928, karen.bengston@nemours.org; Stephanie Wight, (202) 868-4016, swight@thereisgroup.com

---

Additional assets available online: **Photos** (1)