Promising trial results of drug to treat RSV published in New England Journal of Medicine

Results from a new respiratory syncytial virus (RSV) antiviral study have paved the way for the first RSV clinical trial in hospitalized infants in the United States in 40 years.

The new antiviral drug, ALS-008176, developed by Allos Biopharma and John DeVincenzo, MD, medical director of Molecular and Viral Diagnostics at Le Bonheur Children's, has shown potential in fighting RSV infection. Study results were published in the Nov. 19 edition of the New England Journal of Medicine and could re-define how physicians worldwide treat RSV, the No. 1 cause of hospitalization in infants.

This multinational clinical trial is planning to recruit patients at medical centers across the world, including Le Bonheur Children’s Hospital. DeVincenzo is lead author of the NEJM study and also serves as professor of Pediatrics and professor of Microbiology, Immunology and Biochemistry at the University of Tennessee Health Science Center.

Stokes to edit new AAP guide

Dennis Stokes, MD, executive committee member of the AAP Section on Pulmonology and Sleep Medicine, will co-edit with Allen Dozier, MD, of New York Medical College a new AAP publication tentatively entitled Pediatric Pulmonology, Asthma and Sleep Medicine: A Guide for Primary Care, due out in 2017. The new publication is based on the 2011 AAP publication Pediatric Pulmonology, but is intended as a rapid resource for primary care practitioners.

Research finds tie between abnormal lung function, other complications

High rates of abnormal infant lung function are associated with high rates of complications like gastro-esophageal reflux and passive cigarette smoke exposure in infants, according to a study published in PLOS One by Pediatric Pulmonologist James Tutor, MD, and his colleagues. Tutor used Le Bonheur’s pulmonary function lab to study the correlation and found that swallowing dysfunction treatment did not completely resolve the lung function changes.

Le Bonheur participates in CDC pneumonia EPIC study

Le Bonheur Children’s was one of four sites participating in the Centers for Disease Control and Prevention’s Influenza Division’s Etiology of Pneumonia in the Community (EPIC) study – the largest-ever study of community-acquired pneumonia in hospitalized children and adults. Preliminary results have shown pneumonia remains a common cause of hospitalization in children, predominantly in those younger than age 5. The study results have added new pediatric pneumonia EPIC study

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Pulmonologists, Healthy Lifestyle Clinic focus on physical fitness

The Pediatric Pulmonology team is partnering with Le Bonheur’s Healthy Lifestyle Clinic to study physical fitness in children with chronic disease. Current research led by exercise physiologist Webb Smith, PhD, is focused on the use of fitness trackers and video game technology as support tools for exercise programs in children with severe obesity and chronic disease.

Study evaluates pulmonary function after hematopoietic stem cell transplant

Pulmonary complications are a significant cause of morbidity and mortality after allogeneic hematopoietic stem cell transplantation, according to a new Le Bonheur study. Husband-and-wife team Drs. Saumini and Ashok Srinivasan of Le Bonheur Children’s Hospital and St. Jude Children’s Research Hospital led a study published in the Annals of the American Thoracic Society that focused on the relationship between pretransplant pulmonary function tests (PFTs) and development of post-transplant pulmonary complications in children.

Researchers tackle asthma, influenza virus infection

Le Bonheur Children’s researchers Amali Samarasinghe, PhD, and Jon McCullers, MD, are leading a study looking at the role asthma plays in influenza virus severity. Their work has established that the state of allergic airways at the time of virus infections affects disease, and that acute allergic asthma modifies the response to viruses like influenza. They are working now to determine what mechanisms are involved in this protection.
CHAMP receives EPA’s Environmental Leadership award

Le Bonheur Children’s Hospital’s CHAMP program – Changing High Risk Asthma in Memphis through Partnership – received the 2015 National Environmental Leadership Award in Asthma Management from the Environmental Protection Agency (EPA). The award is EPA’s highest recognition program, honoring health care providers and community programs for excellence and success in helping people with asthma lead healthy, active lives.

Le Bonheur created CHAMP in 2013, thanks to a $2.9 million Health Care Innovation award from the Centers for Medicare and Medicaid. The program is focused on reducing asthma-related hospitalizations and emergency room visits.

Study finds free radical toxins, harmful aerosols in e-cigarettes

Electronic- or e-cigarettes release damaging free radical toxins during the vaporization process, and exposure to e-cigarette aerosols can cause airway inflammation and compromise the immune system, according to new research published in the open-access journal PLOS ONE.

A team of researchers at the Children’s Foundation Research Institute at Le Bonheur Children’s Hospital joined scientists at Johns Hopkins School of Public Health to study the health effects of e-cigarette vapors in mice.

Le Bonheur researcher Stephanie Cormier, PhD, and her team measured the free radical content of e-cigarette exposure using electron paramagnetic resonance spectroscopy.

“We know that e-cigarettes inhale users more puffs compared to regular cigarette users in order to get the same amount of nicotine,” Cormier said. “Because of that, users are exposed to higher levels of these damaging free radicals.”

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PULMONARY INFECTION


The use of the word 'Stevens-Johnson syndrome' in this article needs to be clarified before publication. The term 'Stevens-Johnson syndrome' is a misnomer and is not a recognized medical term. It is recommended that the term be replaced with a more accurate and standard term.