

For immediate release

Technology Demonstrates Significant Reduction of Airborne Bacteria in Clinical Trials

PHILADELPHIA, PA, October, 2014 – Researchers at the Wake Forest Baptist Medical Center today announced that studies have conclusively demonstrated that the PhotoxAir™ purification system significantly reduced airborne bacteria in clinical trials conducted in an emergency department setting.

Wake Forest researchers presented this data at ID Week which is the annual meeting of the Infectious Diseases Society of America, the Society Healthcare Epidemiology of America, the HIV Medicine Association and the Pediatric Infectious Diseases Society. ID Week features the latest science and bench-to-bedside approaches in prevention, diagnosis, treatment and epidemiology of infectious diseases.

The PhotoxAir purification system treats indoor air with a proprietary process that utilizes UV light and a unique catalyst. “The catalytic reduction process in the mobile PhotoxAir unit destroys bacteria, viruses and other contaminants within the unit itself ensuring that no dangerous levels of ozone or formaldehyde are produced” states Dr. Elliot Berman, Ph.D., inventor of the PhotoxAir purification technology.

In testing conducted in the Emergency Department at Wake Forest Baptist Medical Center, air samples were taken at several locations in rooms around the patient’s bed using Anderson Samplers. All samples were collected on blood agar plates. The air was sampled for about 20 minutes for each of 50 patients prior to introduction of the PhotoxAir system in order to create a baseline. The PhotoxAir system was then introduced into the patient room and operated for 20 minutes at which time the air was sampled again. Each patient served as his/her own control. Once the air samples were completed, the plates were placed in an incubator for 48 hours and the number of bacterial colonies were counted on all plates and recorded.

Analysis of the results showed a very significant reduction (p-value of ≤ 0.001) of bacterial load from baseline compared to treatment with the PhotoxAir system. Measurements were taken at a number of locations within each patient’s room. The percent reduction of bacterial load ranged from 26.7% to 54.2% based on sampling location. The original goal of 20% reduction was exceeded at all locations and for the total room.

“We are very encouraged by these results and look forward to continued evaluation of the PhotoxAir system on other potentially pathogenic airborne contaminants such as viruses and fungi” stated Dr. Werner Bischoff, MD, Ph.D., Associate Professor, Infectious Diseases Epidemiology & Prevention at Wake Forest School of Medicine and the study Principal Investigator.

“Airborne transmission of pathogens, including flu and other viruses, can result in rapid spread of disease. For example, influenza has been responsible for three pandemics in the last century alone, with an overall death toll reaching tens of millions, and continues to cause annual epidemics of varying severity worldwide. The current understanding of aerosol transmission assumes that a number of human pathogens are spread by respiratory secretions and/or infect by way of the respiratory tract. There is a significant need for new technology to help in the battle to reduce airborne transmission of pathogens. Hospitals and medical clinics are continually looking for better ways of controlling airborne microbial loads leading to hospital-associated infections”, said Dr. Bischoff.

About PhotoxAir

PhotoxAir is an indoor air purification system that significantly reduces harmful airborne microorganisms and indoor air pollutants. The PhotoxAir patented system is designed to make an important contribution to improving air quality in hospitals, physician offices, schools, nursing homes and day care centers. PhotoxAir technology has been lab tested and clinically proven to effectively reduce viruses, bacteria, fungi, mold and unwanted or harmful odors. For more information visit www.photoxair.com.