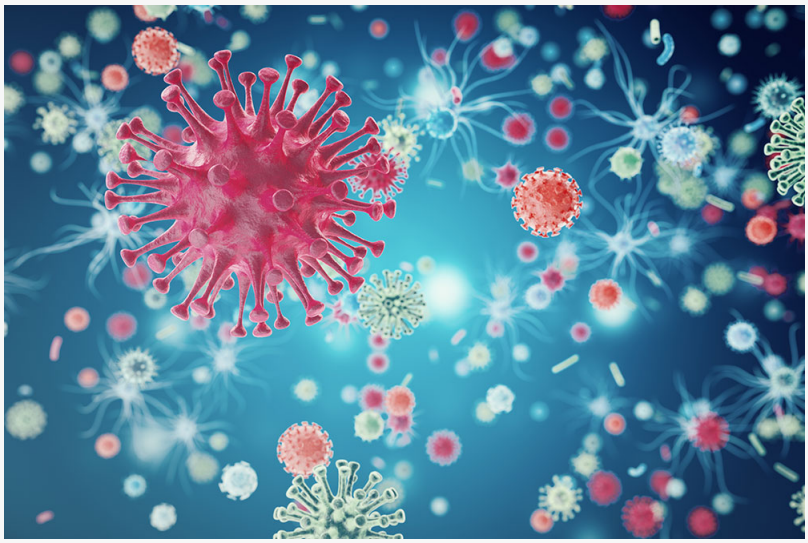
Ancon Medical begins human trials in search for flu biomarker

Medical device maker taps University of Maryland researcher in tests to develop powerful screening technology for the flu virus



The Flu Virus

BLOOMINGTON, MINNESOTA, USA, March 5, 2018 /EINPresswire.com/ -- With its worldwide impact and mounting death toll, the 2017-2018 influenza season shows that the viral disease isn't just a fever and the sniffles, but rather a dangerous disease that can spread rapidly between people. That's why a leading healthcare technology company is pushing forward with trials that can help doctors and medical staff easily identify the disease early in the process through a simple breath test.

Ancon Medical Inc. is conducting its first human trials of Nanoparticle Biomarker Tagging (NBT) technology, an innovative breath screening technology that could more frequently identify influenza early and help slow the spread of the virus. The company conducting the trials through the University of Maryland and Professor Donald K. Milton, a leader in the study respiratory diseases and transmission.

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>
> *Wesley Baker - CEO of Ancon Medical*

The trials seek to identify the "biomarkers" for influenza, which act as organic signatures specific to a disease. This discovery would be a key step forward for NBT technology, which works by identifying biomarkers diseases in exhaled breath, said Ancon Medical CEO Wesley Baker. Once identified, an NBT device could be programmed to search for these biomarkers, providing a fast, affordable, and effective option for influenza screening.

"There are a many exciting possibilities that could emerge from these trials. Imagine how by simply breathing into a tube, you could find the first signs of the flu, catching the disease in its tracks and preventing its spread through early treatment and isolation, "said Baker, adding that the current flu season has demonstrated how easily the disease can spread.

"Early detection can help curtail the spread of the flu and save lives in the process. This year's flu season shows what problems the rapid spread of the virus can cause. Ancon Medical is working to be

part of a solution," Baker added.

Health officials have described this year's flu season as especially harsh, with two strains of the virus circulating simultaneously, creating elevated numbers of hospital visits and deaths. The U.S. Center of Disease Control estimates that the seasonal disease can claim the lives of as many as 646,000 around the globe each year. Furthermore, the H3N2 flu virus strain that is circulating is more virulent than other common strains, reducing the effectiveness of the flu shot and increasing spread through human contact, the CDC reported.

"This year's influenza season shows not only how quickly the disease can spread through human contact, but also how the flu shot isn't always an effective way to halt the spread of the disease," Baker said. "Dr. Donald Milton is an expert on how diseases spread, with extensive study into influenza, and his experience and perspective will guide Ancon Medical's first human trials and the search for the influenza biomarker."

In leading the trials, Dr. Milton brings more than 30 years of experience in environmental and occupational respiratory epidemiology, toxicology, and infectious disease transmission. His expertise is in health outcomes measurement in respiratory epidemiology, including exhaled breath analysis of gases and exposure assessment. His work has focused on understanding how the lung generates particles and studying the best ways to sample these particles while preserving their biological properties.

Milton's most recent work includes a thorough study with his University of Maryland School of Public Health colleagues that shows influenza can be transmitted simply through exhaled breath, not coughing or sneezing, as was previously thought. The study, which was the subject of a Time Magazine story, showed that the aerosol particles collected from sick students' breath also contained the flu virus, demonstrating that the disease can spread more easily than previously thought.

"The first signs of this disease can be found in the breath, and Dr. Milton is the ideal candidate to lead these trials into how NBT technology can be used to reduce the impact of flu epidemics," Baker said. "He has devoted his career to studying how the lungs work and how disease affects them. We're excited to see how his experience can contribute to the growth of NBT technology."

Once the influenza biomarker is discovered, healthcare professional will be able to program NBT technology to search for the disease's signature in the breath, Baker said. Researchers have already discovered the biomarkers for more than 400 diseases, from lung cancer and tuberculosis to the Ebola and Zika viruses, all of which could be programmed into an NBT device.

NBT technology works by ionizing a sample, tagging the ions with specially generated nano-objects and then using a laser to count the molecules to identify the chemicals and to gauge concentrations. Ancon Medical uses this technology in an NBT device that can produce unprecedented sensitivities in searching for diseases, while also offering an affordable, versatile solution for many of the challenges facing disease screening.

"With proper training, an NBT device can be used by non-medical personnel to conduct screenings. It's also affordable enough to be brought into small hospitals and clinics. And discovering additional biomarkers would only make the technology more effective, producing even better outcomes for doctors, medical staff, and most of all, patients," Baker said. "Ancon Medical is excited about what these human trials can discover and the potential benefit they can bring to healthcare providers around the world."

Ancon Medical, is a subsidiary of Ancon Technologies Ltd., has patents on NBT technology in both

the U.S. and U.K. Ancon Medical is a member of Medical Alley, a Medical trade association based in Minnesota.

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