# New Abbott Technology May Uncover The Root Of Critical Infections And Cut Health Care Costs

Innovative Abbott testing technology may help to identify severe infections sooner

A study shows the technology could lower associated health care costs by 30 percent and reduce the unnecessary use of antibiotics

WASHINGTON, Sept. 8, 2014 /PRNewswire/ -- A new study suggests a pioneering testing technology could reduce hospital stays by up to eight days and lower annual health care costs for people with serious infections by approximately $2.2 million (€1.5 million / £1.2 million).[1] The cost reductions are based on a health economic model from the RApid Diagnosis of Infections in the CriticAlly IlL (RADICAL) study, presented today at the 54th Interscience Conference on Antimicrobial Agents and Chemotherapy in Washington, D.C.

The RADICAL study indicates that Abbott's technology (Polymerase chain reaction/Electrospray Ionization Mass Spectrometry or *PCR/ESI-MS)* has the ability to detect the source of the infection – such as bacteria, fungi or viruses – within hours, even when blood cultures (current standard of care) are negative. This information could help doctors diagnose and initiate appropriate treatments more quickly. Additionally, the Abbott technology may offer the potential for earlier discontinuation of broad-spectrum antibiotics.

"When a critically ill person enters the hospital with a suspected infection, clinicians try to determine the cause using tests that may take days to weeks. This can lead to significant delays in appropriate treatment and extended hospital stays," said David J. Ecker, Ph.D., divisional vice president, R&D for Abbott's Ibis Biosciences business. "Abbott's new technology is designed to identify infections rapidly, without culture, and provide clinicians with information to quickly prescribe the most effective treatment."

An independent, expert panel of physicians reviewed the RADICAL study results from samples obtained from 420 critically ill patients with suspected severe infections from the United Kingdom, France, Belgium, Poland, Switzerland and Germany. After retrospectively comparing Abbott's technology versus culture, the physicians[2] reported they would have prescribed a different course of treatment in 57 percent of the cases evaluated based on the Abbott technology results.

"More than 50 percent of blood culture tests come back negative, even when infections are believed to exist," said study author Jean-Louis Vincent, M.D., Ph.D., Professor of Intensive Care, Université Libre de Bruxelles and the Head of the Department of Intensive Care, Erasme. "The results of the RADICAL study and the economic analysis suggest the Abbott technology will provide actionable information much earlier, allow physicians to improve patient outcomes and may ultimately lower overall health care costs related to these serious infections."

Each year, sepsis affects more than 26 million people worldwide. The fast-moving bloodstream infection is considered the most expensive in-hospital condition, costing more than $20 billion each year in the U.S.[3] and more than £2.5 billion in the UK.[4] Based on results from the RADICAL study, it was determined that by using the Abbott technology, a hospital could reduce intensive care costs for people with blood-related infections by more than 30 percent each year.[1]

Abbott has developed a platform based on *PCR/ESI-MS* technology with the goal to deliver a broad range of tests that can identify hundreds of bacteria, fungi and viruses directly from a patient specimen within eight hours. The platform, known as IRIDICA (not available in the U.S.), is expected to be available as a CE marked *in vitro* diagnostic device in European countries within the coming months.

**About Abbott's Ibis Biosciences**
Abbott is a global leader in *in vitro* diagnostics and offers a broad range of innovative instrument systems and tests for hospitals, reference labs, molecular labs, blood banks, physician offices and clinics. The mission of Abbott's Ibis Biosciences business unit is to create diagnostic solutions that can provide faster, more actionable results for critical infections. Ibis Biosciences is focused on delivering an innovative approach to the detection and characterization of a broad array of microorganisms, contributing to Abbott's expanding role in molecular testing.

**About Abbott**
Abbott is a global health care company devoted to improving life through the development of products and technologies that span the breadth of health care. With a portfolio of leading, science-based offerings in diagnostics, medical devices, nutritionals and branded generic pharmaceuticals, Abbott serves people in more than 150 countries and employs approximately 69,000 people.

Visit Abbott at www.abbott.com and connect with us on Twitter at @AbbottNews.

[1] For a hospital that sees approximately 500 patients with blood-related infections each year. Costs were derived from intensive care and non-intensive care lengths of stay.

[2] Nine independent physicians from the United Kingdom, France, Belgium, Poland, Switzerland and Germany on an adjudication panel assessing the RADICAL study retrospectively.
[3] Agency for Health care Research and Quality Health care Cost and Utilization Project Statistical Brief No. 160 August 2013. National inpatient hospital costs: the most expensive conditions by payer, 2011
[4] UK Sepsis Trust, August 2013. http://www.england.nhs.uk/wp-content/uploads/2013/12/sepsis-brief.pdf

CONTACT: Media: Darcy Ross, Tel: +1(224) 667-3655, Cell: +1(224) 475-7673, Rachael Jarnagin, Tel+1(224)668-6552, Cell: +1 (224) 360-2146, Financial, Tina Ventura, Tel: +1(224) 668-7606