

New demonstration project marks World Sepsis Day ***Novel partnership with industry looks to enhance sepsis diagnosis, treatment***

(Calgary & Edmonton, Alberta) September 13, 2017... Alberta physicians will soon be evaluating new laboratory tests for improving the diagnosis and treatment of sepsis, a potentially fatal infection that develops in the bloodstream and major organs.

A four-way partnership has been struck between Alberta Innovates, Alberta Health Services (AHS), the Institute of Health Economics and bioMérieux to improve the way sepsis is managed in the province.

“This partnership represents a new way to interact with industry,” says Dr. Blair O’Neill, Associate Chief Medical Officer with AHS’ Strategic Clinical Networks™ (SCNs). “We struggle to determine which new technologies can help us care for patients for the best cost. Instead of simply looking at what’s available off the shelf, we’ve sought collaboration with our industry partners to tailor a solution for Alberta’s health system.”

AHS, through its SCNs, has identified sepsis as a critical problem. Up to one in five admissions to intensive care units in the province are related to sepsis. Other jurisdictions in Canada have similar numbers.

Sepsis is a potentially life-threatening complication of a body’s response to an infection. Sepsis occurs when the body’s attempt to fight the infection triggers inflammatory responses throughout the body. If left untreated, this inflammation can lead to damage to multiple organ systems, ultimately causing them to fail.

A sepsis diagnosis tool, called *VIDAS® B.R.A.H.M.S PCT™*, created by bioMérieux, will identify the type of sepsis an individual has and help physicians treat the specific infection faster and more efficiently.

“In the past, doctors would treat sepsis with expensive broad-spectrum antibiotics, hoping to target the right bacteria,” says Dr. Michael Meier, a physician with AHS’ Critical Care SCN. “This new diagnostic tool will allow us to determine if the patient actually has sepsis and then the type of sepsis a patient may have and which antibiotic to best treat the infection.”

There are other benefits besides improved efficiency in choosing the most effective antibiotic. Limiting the range of antibiotics a patient is exposed to helps reduce the risk of them developing opportunistic infections like *clostridium difficile*, which can move in when a patient’s gut microbiota is thrown out of balance by the arsenal of antibiotics.

Beginning next month, researchers in Edmonton and Calgary will assess whether the diagnostic tests will lead to better treatments, prove cost-effective, and be adaptable to various clinical settings. The evaluations are expected to last between 12 and 18 months. However, it is establishing a better way for our strained health care system to continue to add new technologies to improve patient outcomes and measure their true value.

World Sepsis Day, Sept. 13, is an awareness-raising initiative of the non-profit organization, the Global Sepsis Alliance.

“Alberta Innovates is proud to have played a role in bringing the partners to the table,” says Reg Joseph, Alberta Innovates, Vice President of Health. “We have created a platform for public-private partnerships that introduce innovative technologies into the healthcare system to fulfill a specific healthcare need in Alberta. Our job is to enable the healthcare ecosystem to improve patient outcomes for Albertans — that is exactly what we did here. I am thrilled to see all the excitement this initiative is generating throughout the Canadian healthcare landscape.”

“Full credit to our Strategic Clinical Networks for working through a process whereby we identify critical needs within the health system, and then partner with industry to find solutions,” says Dr. Kathryn Todd, AHS Vice-President Research, Innovation and Analytics. “Our goal is to find ways to more quickly introduce proven innovations across the health system, for the benefit of all Albertans.”

“Unique partnerships like this are essential if we wish to effectively and efficiently address complex health system problems,” adds Dr. Christopher McCabe, Executive Director and CEO of the Institute of Health Economics. “This project serves as a fantastic example of how to optimize health system experts, from all sectors, to discover ways in which we can better treat this and other infectious diseases.”

“Measuring PCT at clinical presentation and serially over 4 days will provide clinicians with high medical value information to help them identify patients who are at greatest risk of mortality and ultimately can result in improved, more targeted and intensified patient care and better medical outcomes,” said Mark Miller, Chief Medical Officer at bioMérieux.

BACKGROUND

bioMérieux is a global leader in *in vitro* diagnostics for more than 50 years. bioMérieux has always been driven by a pioneering spirit and unrelenting commitment to improve public health worldwide. Today, in more than 150 countries through 42 subsidiaries and a large network of distributors, bioMérieux provides diagnostic solutions that improve patient health and ensure consumer safety. [bioMérieux.ca](http://bioMerieux.ca)

Alberta Health Services: Alberta Health Services is the provincial health authority responsible for planning and delivering health supports and services for more than four million adults and children living in Alberta. Its mission is to provide a patient-focused, quality health system that is accessible and sustainable for all Albertans.

Institute of Health Economics: The Institute of Health Economics (IHE) is an independent, not-for-profit organization that performs excellence in health economics research and health technology assessment. Our core objectives include: supporting decision making in health policy and practice with evidence from research in health economics and health technology assessment; assessing the medical, economic, social, and ethical implications of both established and new health practices, procedures, and technologies; and, facilitating discussions and partnerships among government, academia, industry and healthcare providers to address important issues in health care. Visit us at <http://www.ihe.ca> to learn more.

Alberta Innovates is a provincially-funded Corporation with a mandate to deliver 21st century solutions for the most compelling challenges facing Albertans. We do this by building on our province's research and technology development strengths in the core sectors of health, environment, energy, food and fibre and platforms such as artificial intelligence, nanotechnology, and omics. We are working with our partners to diversify Alberta's economy, improve our environmental performance and enhance our well-being through research and innovation. Visit us at albertainnovates.ca

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