



CHRONIX BIOMEDICAL

Routine Serum DNA Blood Tests
for Early Cancer Diagnosis and Management

NEWLY PUBLISHED STUDY USING CHRONIX TECHNOLOGY CONFIRMS SERUM DNA CAN IDENTIFY THE EARLY PRESENCE OF DISEASE

-Study in Zoonoses & Public Health Further Illustrates the Potential Utility of Serum DNA for Diagnostic and Prognostic Applications-

San Jose, California, June 23, 2009 – Chronix Biomedical today reported that a new study in a peer-reviewed journal further confirms the potential diagnostic and prognostic utility of using circulating fragments of DNA to detect early stage disease. These DNA fragments, referred to as serum DNA, are released into the blood stream in trace amounts during the disease process. Chronix Biomedical has developed proprietary technology that can find, isolate and identify these serum DNA sequences, enabling very early detection of an underlying disease state or of a change in response to treatment. The study in the current issue of the journal *Zoonoses & Public Health*¹ demonstrated that using Chronix technology, researchers were able to identify specific signature sequences in serum DNA before clinical symptoms appeared in animals experimentally infected with BSE (mad cow disease).

“These new results add to the growing body of scientific data validating the value of serum DNA as an early indicator of disease, and also advance our unique ability to apply these findings to the development of laboratory tests for routine clinical use,” said Howard Urnovitz, Ph.D., CEO of Chronix. “Using our proprietary technology and next-generation sequencers, we were able to identify distinctive DNA signatures indicating the presence of BSE in all of the infected animals well before clinical symptoms appeared.”

These new findings follow three previous published studies demonstrating the utility of using serum DNA to identify human cancers, human infectious disease and BSE. For example, a study reported in the December issue of the journal *Blood* showed that serum DNA was able to identify a secondary cancer in a patient before it was clinically apparent.

Of special interest in this current study is the finding that these DNA signatures occurred primarily in non-coding regions of the genome, where geneticists typically would not look. Chronix scientists believe these findings may lead to a better understanding of the genetics of disease development, while advancing Chronix’s own ability to harness these early changes for diagnostic and prognostic applications.

1. Beck, J., Urnovitz, H., Groschup, M., Ziegler, U., Brenig, B., Schutz, E. (2009) Serum Nucleic Acids in an Experimental Bovine Transmissible Spongiform Encephalopathy Model. *Zoonoses and Public Health*. (Published Online May 20, 2009).

About Chronix Biomedical

Chronix Biomedical is pioneering a breakthrough approach to the diagnosis and management of chronic diseases and cancer. It has developed proprietary technology that measures and categorizes DNA sequences circulating in the serum that are associated with specific changes in disease and health status. Using advanced genome analysis methodology, proprietary data tools and disease-specific databases, Chronix has demonstrated the utility of its diagnostic and prognostic approach in multiple myeloma and mad cow disease, and studies in other diseases are underway. The company plans to collaborate with a variety of partners to develop and market its serum DNA-based assays that have the potential to transform the management of a broad range of cancers and other conditions. Chronix is headquartered in San Jose, California and has research facilities in Germany. www.chronixbiomedical.com