



MITOMICS™

Empowering Clinical Insight™

Mitomics

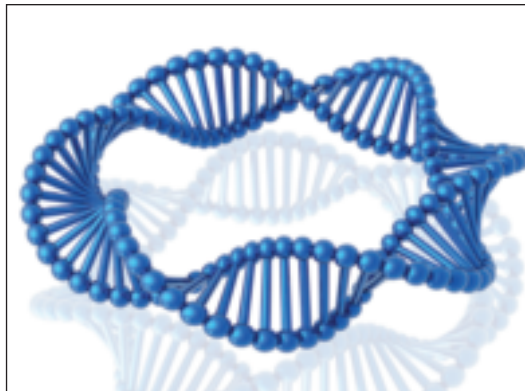
Empowering Clinical Insight

Advanced Product Solutions for the Screening, Diagnosis and Prognosis of Cancer and Other Disease States

Mitomics is the world leader in the research and development of mitochondrial DNA (mtDNA) based biomarkers – a new and revolutionary approach to screening, diagnosis and treatment of cancer and other disease states. The unique structural and functional characteristics of mtDNA make it a highly attractive system for biomarker discovery, early disease detection, monitoring, risk assessment and therapeutic targeting.

Using Mitomic Technology™ to Develop More Accurate, Non-Invasive Testing

Mitomic Technology is able to address many of the limitations of current diagnostic approaches and provides significant benefits over traditional DNA-based biomarkers and tests. Proprietary mtDNA biomarkers allow for:



- The potential of unprecedented early detection of disease
- Non-invasive detection and monitoring of solid tumors
- Reliable detection of disease with high sensitivity and specificity
- Diagnosis of disease in adjacent, normal tissue or tumor margins through a “field effect”
- Robust assay due to high copy number which allows routine marker detection in samples with low cellularity
- Rapid, cost effective screening and discovery

The Importance of Mitomic Technology in Early Cancer Detection

Large-scale deletions in mtDNA can indicate cellular changes that are associated with the development of cancer. Additionally, these changes and mutations accumulate in a way that enables quantitative measurement.

2010	Prostate Core Mitomic Test™ is launched
2008-2009	Original publication on prostate cancer associated mitochondrial deletion is completed
2006	Mitochondrial DNA mutations demonstrate cancerization field effect
2004	UVR exposure determined to cause large-scale mitochondrial genome deletion
2001	Mitomics incorporated (Genesis Genomics)
1997-1998	Discovery that mitochondrial DNA mutations occur in tumors
1988	First molecular identification of mitochondrial diseases
1981	Complete sequencing of a human mitochondrial genome
1961	Discovery of DNA in mitochondria
1950	Identification of mitochondria by electron microscopy
1946	Discovery of cancerization field effect
1927	Mitochondrial metabolism associated with malignant transformation
1924	Nobel laureate Otto Warburg identifies cancer as a mitochondrial dysfunction

Mitomic Testing for a Variety of Disease States

Using our proprietary Mitomic Technology™, Mitomics is developing an advanced suite of product solutions for disease detection and prognosis. Mitomic Tests currently in development include tests for the early detection of:

- Prostate cancer
- Breast cancer
- Uterine cancer
- Cervical cancer
- Colorectal cancer
- Endometriosis
- Melanoma, skin cancer and other dermatological conditions

All of these revolutionary tests will offer high sensitivity and specificity and most will be non-invasive.

The First Mitomic Test is Now Available

The Prostate Core Mitomic Test™ is now commercially available in the United States. This new innovation in prostate cancer detection allows physicians to order a simple lab test instead of second prostate biopsy when the histological results of the first biopsy fail to eliminate suspicion of prostate cancer. With the Prostate Core Mitomic Test, physicians gain clinical insight and patients can avoid a second painful and costly procedure.

About Mitomics

Headquartered in Thunder Bay, Ontario, Canada, Mitomics is comprised of a team of business and research experts with a proven ability to discover and develop commercially viable mitochondrial genome-based products to improve clinical insight and therapeutic decisions.



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The Prostate Core Mitomic Test has not been reviewed by the FDA.

0211.0002. Rev 2.