Colorectal Cancer Detection Using Targeted Serum Metabolic Profiling

Daniel Raftery
Professor, Department of Anesthesiology & Pain Medicine
University of Washington
Member
Fred Hutchinson Cancer Research Center
Colorectal Cancer Detection Using Targeted Serum Metabolic Profiling

Daniel Raftery
Department of Anesthesiology & Pain Medicine
Analysis of small molecules in bio-systems
~8,000-20,000
Endogenous metabolites
Exogenous metabolites

Applications in Metabolomics
Disease Diagnostics
Companion (Drug) Diagnostics
Toxicology
Food and Nutrition
Drug Discovery
Personalized Medicine
Systems Biology Research

Colorectal Cancer (CRC)

- No.3 leading cancer type in the US.
- No.3 cause of cancer death in the US.
- Five-year Relative Survival Rates:
  - Local: 90%
  - Regional: 70%
  - Distant: 12%

Picture source: AGAJournals.org

American Cancer Society, Surveillance Research 2013
Classical Screening Tests

Blood test

Colonoscopy

Stool test

Biopsy

Blackdoctor.org

Healthland.tiem.com

Nytimes.com

drdach.com
Low sensitivity (43% for FOBT, 70% for FIT)

Invasiveness

Potential risks of complications

Experience of pain and discomfort

Low compliance rate (<50% for colonoscopy)
ATTENTION!

The entire presentation will be provided to registered attendees only at the conference!

To view the rest of this exciting presentation and many more please register for the conference at

www.gtcbio.com