



Award ID:
RP101287

Project Title:
Cancer Biology and Genetics Including Oncogenesis Genomics and Proteomics

Award Mechanism:
Company Commercialization

Principal Investigator:
James Mapes

Entity:
Rules-Based Medicine

Lay Summary:

Rules-Based Medicine® (RBM), the world's leading multiplexed biomarker testing laboratory, provides comprehensive protein biomarker products and services based on its Multi-Analyte Profiling (MAP) technology platform. RBM's biomarker testing service provides pre-clinical and clinical researchers with reproducible, quantitative, multiplexed immunoassay data for hundreds of proteins in a cost-effective manner, from a small sample volume and from multiple species. RBM is CLIA certified and supports GLP studies.

Most diseases and drug effects manifest themselves in abnormal levels of specific biomarkers found in the peripheral blood. By providing multiplexed, quantitative, and reproducible tests for hundreds of biomarkers, RBM enables research that historically was not available due to sample volume requirements and associated costs. Use of our testing services can help determine the sources of both the positive and negative effects of drugs during pre-clinical research and clinical trials. Biomarker testing results identify patients most likely to respond to a given therapy and the biochemical reason for that response, making clinical trials more successful and effective.

RBM's OncologyMAP™ program is the result of our collaboration with the Proteomics Initiative of the National Cancer Institute. The first version of OncologyMAP, released in the fall of 2010, contains 102 quantitative immunoassays for "cancer-related" blood-based biomarkers. It is the only available method to quickly, accurately, and cost-effectively quantify all of these important oncology biomarkers from a small amount of biological material. Biomarker patterns discovered in the blood or tissue can serve as diagnostic tests for early detection of tumors when therapeutic intervention is more successful or as prognostic tests that provide physicians with information to design treatment protocols. Biomarker patterns can also serve as companion diagnostics, distinguishing those who will benefit most from a specific therapy regimen. Over the next few years, RBM will use funding from the Cancer Prevention and Research Initiative of Texas (CPRIT) to expand OncologyMAP by over 150 new cancer-related biomarker assays.

RBM also performs custom assay development, participates in co-sponsored research programs, and pursues in-licensing of novel high-value assays.

RBM employs over 145 people at three facilities:

- Austin, TX: Corporate headquarters and CLIA-certified biomarker testing laboratory
- Lake Placid, NY: Multiplex assay development and manufacturing
- Reutlingen, Germany: TruCulture® manufacturing and custom cell culture services