Serum Biomarkers for Early Detection of Ovarian Cancer

OCR Number: OCR 7144

Description:

**Targeted Ovarian Cancer Proteome Assay (TOCPA)**

For Early Detection of Ovarian Cancer

- Although survival rates are high when ovarian cancer is diagnosed early, most diagnoses are for advanced disease where the prognosis is poor.
- We build a targeted serum proteome assay for ovarian cancer that is based on an extremely robust, mass spectrometric (MS) approach, Multiple Reaction Monitoring (MRM).
- Targeted Ovarian Cancer Proteome Assay (TOCPA) validated differential expression of 10 biomarkers, with ApoA-IV having best predictive value.
- TOCPA can be modified and expanded to include other biomarkers.
- This research represents an important step towards improving the OVA1 test and developing a clinical test for diagnosing ovarian cancer.

**IP status:** Provisional Patent Application No. 62/499,939

**Lead Innovator:** Kenneth Williams, Ph.D.

**Reference:** Under review

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**Figure.** Comparison of relative ApoA-IV concentrations in sera from control versus ovarian cancer patients as determined by the TOCPA PRM assay. The red arrow line at 5.95E+07 is a breakpoint that perfectly separates the 6 ovarian cancer from 7 control sera samples.