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

![Figure](image.png)

*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.

**PI:** Kenneth Williams

**Licensing Contact:** Lolahon Kadiri
lolahon.kadiri@yale.edu