PURPOSE: In spite of efforts and investments, a preventable cervical cancer remains the primary cause of death from malignant diseases in women worldwide. The best prevention from this deadly disease is cytological screening to early detect pre-cancerous lesions which are curable. However, 20M women at risk in the US are not protected; furthermore, only 6.5% of 1,700M women at risk globally get this prevention. Why? Costly Pap test, lack of infrastructure and trained professionals, women do not have access to medical institutions or are prevented to visit gynecologists (e.g., religious issues), or avoid Pap test because they are afraid and not comfortable with pelvic exam.

METHODS: MarkPap® test was introduced at BIO 2005 and 2006 Innovation Corridor as a new emerging biomarker-based technology that provides solution for most of these concerns.

RESULTS: Based on clinical trials the MarkPap test was found to be affordable for low-resource countries, customer friendly, more accurate than existing techniques, and well controlled test. According to the preliminary results, the novel biomarker brings also a prospective for a Home Pap test (taking the sample at home) and Tele-Pap test (telemedicine - evaluation of images here from all over the world). We have also determined sensitivity of this test to detect HPV disease and another use of the biomarker for the control of HPV immunized women.

CONCLUSION: The biomarker-based MarkPap® technology may revolutionize cervical cancer screening providing cervical cancer prevention globally and saving women's lives. A technology of such magnitude must be profitable for the investors and for the community supporting it.