Technology Overview

Bacterial Vaginosis is the most common vaginal infection and is characterized by a disruption in the normal bacterial composition present in the vagina. The condition is poorly understood, but is associated with preterm birth, pelvic inflammatory disease, HIV acquisition, and other STDs. Current methods for diagnosis of Bacterial Vaginosis involve microscopy, requiring extensive clinician training, or PCR, which is expensive. Dr. Fredrick’s lab has identified 55 bacterial metabolites that are each either significantly increased or decreased in vaginal fluids during bacterial vaginosis.

This biomarker panel has been confirmed in two studies, using patient samples in mass spectrometry bacterial metabolite screens. Specific metabolite profiles indicate the presence of particular BV-associated bacteria. Therefore, in addition to diagnosis, the metabolite panel can also aid in determining individualized treatment plans.

Applications

- Diagnostic biomarker panel
- Development of point-of-care diagnostic
- Bacterial Vaginosis

Advantages

- Biomarker panel diagnostic tool that replaces microscopy
- Aids in development of individualized treatment plans

Market Overview

More than four million women treated annually for BV, misdiagnosis can result in worsening of condition.

Investigator Overview

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