



Sylvester Researchers Study Vaginal Microbiome's Role in Screening for Endometrial Cancer

The vaginal microbiome differentiates benign disease from endometrial cancer and can even provide insight about the specific endometrial cancer type and disease severity, according to a study by investigators at Sylvester Comprehensive Cancer Center at the University of Miami Miller School of Medicine, published in *Cancer Research Communications*, an American Association for Cancer Research journal.

These findings provide insight about the abnormal conditions that may lead to and worsen endometrial cancer, according to the study's senior author, Matthew P. Schlumbrecht, M.D., M.P.H., medical co-director of the cancer survivorship program at Sylvester.



Findings from a study by investigators at Sylvester Comprehensive Cancer Center at the Miller School of Medicine provide insight about abnormal conditions that may lead to and worsen endometrial cancer.

“Our findings from this preliminary data could lead to a much-needed screening for endometrial cancer, the most common gynecologic malignancy and among the deadliest in U.S. women,” said Dr. Schlumbrecht, who is also a professor in the Department of Obstetrics, Gynecology and Reproductive Sciences at the Miller School.

This is an exciting development because there is no routine screening for early detection of endometrial cancer, he said.



The study's senior author, Matthew P. Schlumbrecht, M.D., M.P.H., says that findings could lead to better screening.

“Basically, for endometrial cancer, we wait for people to become symptomatic, and that’s a problem because with aggressive types of endometrial cancer, patients may not be symptomatic until late in the disease process,” Dr. Schlumbrecht said.

Studying the Microbiome Across a Diverse Range of Women

In the context of disparities, study author and Sylvester scientist Sophia George, Ph.D., pointed out that while Black and white women in the U.S. are diagnosed with endometrial cancer at similar rates, Black women are almost twice as likely to die from the cancer.



“Black women tend to develop disproportionately high-grade disease, or more serious endometrial cancer,” according to Dr. George, who also is associate professor in the Department of Obstetrics, Gynecology and Reproductive Sciences at the Miller School.

This research, sponsored by a Sylvester Jay Weiss Catchment grant, offers the opportunity to study the microbiome across a diverse range of women, including Black women.

“Relative to the few publications in the literature on the microbiome and endometrial cancer, Sylvester’s population is by far the most diverse, which I think is going to allow us to contribute to endometrial cancer care in meaningful ways,” Dr. Schlumbrecht said.





Study author and Sylvester scientist Sophia George, Ph.D., highlighted disparities in outcomes for Black and white women in the U.S. with endometrial cancer.

Further Research and Collaboration

But more research looking at the role of the microbiome as an endometrial cancer biomarker is needed, and Sylvester researchers are taking the next step.

“We are starting collaborations with Broward Health to expand our cohort and study how the vaginal microbiome may influence survival, response to treatment, and more,” Dr. Schlumbrecht said.

The ultimate goal is to identify ways to noninvasively screen women for endometrial cancer when they have their well woman exams, according to Dr. George.

“Sylvester is one of the few places that focuses on endometrial cancer diagnosis and treatment. We have a unique population that has a high burden of disease, so we are poised and positioned to do studies like this here and in larger populations,” Dr. George said.

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