



How Does Cancer Treatment Impact the Vaginal Microbiome?

Women who undergo cancer treatment may experience symptoms, such as vaginal pain, dyspareunia, and vaginal dryness. These symptoms frequently persist and may progressively worsen without intervention.



Breast cancer represents 32% of all cancer diagnoses in women.⁴



Ovarian cancer ranks among the top five cancers in women and is one of the leading causes of mortality among those with gynecologic malignancies.²

A healthy vaginal microbiome is typically dominated by *Lactobacillus* species, which help maintain vaginal health by producing antimicrobial compounds such as lactic acid, hydrogen peroxide, and bacteriocins. The vaginal epithelium, composed of 30 to 50 layers of stratified squamous cells, serves as a critical barrier to infection.

Chemotherapy affects not only rapidly dividing cancer cells but also healthy tissues with high turnover rates, including the vaginal lining. Furthermore, estrogen-lowering therapies reduce glycogen production in vaginal epithelial cells, depriving *Lactobacillus* of its primary energy source. This disruption of the vaginal ecosystem increases the risk of infections by pathogenic bacteria and viruses.



80% of patients have
vaginal pain after
completing radiotherapy¹



50% of cancer patients
report a lack of lubrication¹



30% of cancer patients
report frequent or
consistent symptoms¹

The Effects of different Breast Cancer Treatments and Medications:



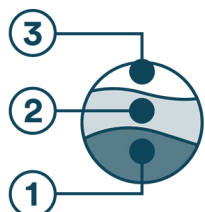
Chemotherapy: Women receiving chemotherapy may develop vulvar and vaginal burning secondary to mucosal inflammation.³



Tamoxifen: This medication has variable effects on the vaginal epithelium. In premenopausal women, it may lead to vaginal dryness due to its anti-estrogenic action on the vaginal mucosa. Conversely, some patients report increased vaginal discharge.³



Aromatase Inhibitors: In comparison to Tamoxifen, AI therapy is associated with a higher incidence of vulvovaginal atrophy and related symptoms, including significant dryness and dyspareunia, due to profound estrogen suppression.³



Bio-Match®

Powered by patented Bio-Match® technology, our products are scientifically formulated to match the natural characteristics of healthy vaginal fluid—optimal pH, iso-osmolality, and a proprietary lactic acid blend. This biomimetic approach protects vaginal tissue, supports a *Lactobacillus*-dominant microbiome, and helps reduce disruptive symptoms like dryness, irritation, and imbalances. For patients recovering from cancer treatment, Bio-Match® products offer gentle, science-backed support for vulvar and vaginal symptoms commonly experienced after chemotherapy, radiation, or hormone therapies. Unlike hyper-osmolar products that can damage tissue and the microbiome, Bio-Match® preserves vaginal health by working in harmony with the body.

To request samples or begin offering Bio-Match® products to your patients, visit theivh.org.

¹<https://pmc.ncbi.nlm.nih.gov/articles/PMC8580013/>

²<https://infectagentscancer.biomedcentral.com/articles/10.1186/s13027-024-00590-7>

³<https://www.menopause.org.au/health-info/fact-sheets/vaginal-health-after-breast-cancer-a-guide-for-patients> (meds)

⁴<https://acsjournals.onlinelibrary.wiley.com/doi/10.3322/caac.21871>