



Intellectual Property Office

Lactocin 160: safe antimicrobial for HIV prevention through control of BV

Technology Reference
R217

Keyword
Drug

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Patent Status
Patent Application Filed

PRODUCT

- Antimicrobial and Antiviral gel, tablet or liquid for douching

ADVANTAGES

- Effective, targeted, non-toxic antibacterial agent
- Kills Bacterial Vaginosis associated bacteria including antibiotic resistant forms
- Can be used for vaginal, rectal and skin applications
- Can be sold as an over the counter product.

THE TECHNOLOGY

Bacterial Vaginosis (BV) is a risk factor for increased HIV transmission and acquisition. Major BV organisms directly up-regulate HIV replication. There is a critical need for an antimicrobial agent that will inhibit BV pathogens without killing healthy lactobacilli. Lactocin 160 is a novel ribosomally-synthesized peptide (bacteriocin) produced by a healthy vaginal strain of *Lactobacillus rhamnosus*. It is an effective, targeted (does not kill healthy lactobacilli), and non-toxic antibacterial agent that kills BV-associated bacteria, including antibiotic resistant forms. It is a better alternative for both prophylaxis and the treatment of BV, which will lead to the reduction of the risk of HIV acquisition and therefore, to the reduction of HIV incidences. In addition, not being an antibiotic, Lactocin 160 will be a formulation with low pH and will include antiviral substance, such as Zinc lactate. This preparation can be used in a form of personal hygiene as an over the counter product.

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