Non-Antiretroviral Microbicides: The candidates

Non-ARV alternatives, and especially microbicides, are of continued interest to researchers, due to concerns about the widespread use of ARV products and the possible emergence of ARV-resistant HIV strains. Several non-ARV microbicides are in various stages of research and, if found viable and effective, would be a valuable addition to the HIV prevention toolbox. Two significant non-ARV microbicides in development are:

- A cyanobacterium lectin product, Cyanovirin-N, impedes the entry and transmission of HIV by binding to the gp120 receptor. Cyanovirin-N successfully averted the vaginal acquisition of simian-human immunodeficiency virus (SHIV) in preclinical studies and human ex vivo tissue\textsuperscript{19}.

- Griffithsin (GRFT) is a lectin derived from marine red algae that displays cross-clade anti-HIV potency and blocks HIV infection irreversibly by binding to viral particles and preventing their assimilation into target cells. GRFT has shown to be safe in in vitro and preclinical studies as a microbicide candidate and the Population Council is evaluating the efficacy of a GRFT-based microbicide gel in preclinical and clinical studies\textsuperscript{19}.