





# MATRIX Product Pipeline Overview

| Product   | Developer  | Product Type                       | Active Ingredient(s)           | How used   | Protection Goal   | Unique Features/<br>Additional Information | Development Status   |   |
|---|--|------------------------------------|--------------------------------|--|---|--|--|---|
|   | <b>TAF/EVG</b><br>Fast-dissolving vaginal insert                       | CONRAD<br>(USA)                    | Fast-dissolving insert         | <b>TAF/EVG</b><br><i>tenofovir alafenamide &amp; elvitegravir</i><br><i>NRTI &amp; integrase inhibitor (ARVs)</i>  | <b>On-demand</b><br><i>(women insert themselves at or around time of sex)</i> | <b>Up to 3 days</b>                        | TAF has also shown activity against HSV, which could be added benefit. Outside of MATRIX, CONRAD is also evaluating use of the insert rectally.              | <b>MATRIX-001</b> is evaluating safety and acceptability of insert at sites in Kenya, South Africa & US –the first Phase 1 study in African women..   |
|   | <b>Dapivirine</b><br>vaginal film                                      | Univ of Pittsburgh<br>(USA)        | Vaginal film                   | <b>Dapivirine</b><br><i>NNRTI (ARV)</i>  | <b>Women insert themselves</b>  | <b>1 month</b>                             | Film would slowly release drug until it completely dissolves.<br><i>Also being developed as dual-purpose product</i>   | <b>MATRIX-002</b> is evaluating acceptability and usability of 2 placebo films at sites in Kenya, South Africa, Zimbabwe & US. Will determine film to be used in first-in-human trial of monthly dapivirine film. |
|   | <b>Dapivirine &amp; levonorgestrel</b><br>dual-purpose vaginal film    | Univ of Pittsburgh<br>(USA)        | Vaginal film<br>(dual purpose) | <b>Dapivirine</b><br><i>NNRTI (ARV)</i><br><b>Levonorgestrel (LNG)</b><br><i>(hormonal contraceptive)</i>  | <b>Women insert themselves</b>  | <b>1 month</b>                             | As film slowly dissolves it would release both dapivirine and LNG until film completely. dissolves   | <b>Pre-clinical</b>   |
|  | <b>Non-ARV/ nonhormonal</b><br>contraceptive dual-purpose vaginal ring | Oak Crest Inst of Science<br>(USA) | Vaginal ring<br>(dual purpose) | <b>Antiviral peptide</b><br><i>(protein fragment –non-ARV)</i><br><b>soluble Adenylyl Cyclase (sAC) inhibitor</b><br><i>(non-hormonal contraceptive)</i> | <b>Women insert themselves</b>  | <b>1 month</b>                             | The antiviral also shows activity against HSV and HPV, which could be an added benefit.<br>The sAC inhibitor affects sperm's ability to move, fertilize eggs | <b>MATRIX-003</b> is evaluating acceptability of 2 placebo rings at sites in South Africa, Zimbabwe & US. Will determine product design to be evaluated in clinical trials with active drug.                      |