

Pod-intravaginal rings delivering antiretroviral combinations for HIV prophylaxis: pharmacokinetics and preliminary safety in a macaque model

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SUPPLEMENTAL MATERIAL

TABLE 1. Cytokine/chemokine concentrations (log-transformed) in vaginal fluids collected using Weck-Cel spears in the IVR treatment group ($N=6$).

	Baseline		IVR treatment (days) median (range)					Post IVR
	-7	0	3	7	14	22	28	31
GM-CSF	0.42 ¹ (0.29-0.49)	0.35 (0.23-0.55)	0.53 (0.29-2.6)	0.71 (0.26-1.9)	0.43 (0.31-1.1)	0.24 (0.086-0.66)	0.37 (0.2-0.66)	0.44 (0.24-0.71)
G-CSF	1.9 (1.6-2.3)	1.7 (1.3-2.3)	2.3 (0.76-2.8)	2 (1.6-2.2)	1.7 (0.76-2)	1.2 (0.73-2.5)	1.3 (0.78-1.8)	1.7 (1.5-1.9)
IFN γ	1.4 (1.1-1.7)	1.2 (0.82-2)	1.4 (0.82-2)	1.4 (0.75-2.2)	1.3 (0.57-2.5)	0.82 (0.51-1.5)	0.85 (0.82-1.6)	1.2 (0.92-1.4)
IL-2	1.4 (1.2-1.5)	1.3 (0.54-1.9)	1.5 (0.89-1.8)	1.5 (0.98-1.7)	1.3 (-0.15-1.6)	1.1 (0.32-1.5)	1.1 (0.55-1.3)	1.3 (1.1-1.5)
IL-10	1.6 (0.37-1.9)	1.6 (1.2-2.7)	1.6 (0.35-2.3)	1.6 (1.4-2.4)	1.5 (1.3-2.4)	1.5 (0.32-1.7)	1.4 (0.95-1.7)	1.5 (1.1-1.7)
IL-17	0.77 (0.48-1.1)	0.71 (0.33-1.5)	0.77 (0.17-1.1)	0.92 (0.61-1.5)	0.83 (0.63-1.3)	0.82 (-0.35-1)	0.39 (-0.29-0.94)	0.65 (-0.21-0.8)
IL-1Ra	4.2 (3.8-4.5)	4.1 (3.5-4.5)	3.8 (3.6-4.4)	4.1 (3.6-4.4)	4.0 (2.7-4.3)	4.0 (3.3-4.4)	3.8 (2.9-4.3)	4.1 (3.7-4.2)
IL-13	1.7 (1.4-1.8)	1.6 (0.82-2.3)	1.6 (1.3-1.8)	1.5 (1.4-1.9)	1.6 (0.82-1.8)	1.4 (1.1-1.7)	1.6 (1.3-1.6)	1.6 (1.4-1.8)
IL-1 β	2.1 (1.1-2.7)	2.3 (0.85-3.7)	2.5 (1.1-3.5)	2.2 (1.5-3.3)	1.8 (0.82-3.5)	1.6 (0.81-2.1)	2.1 (-0.11-2.5)	1.9 (1.2-2.4)
IL-6	1.8 (1.1-2.1)	1.4 (0.82-2.5)	2.3 (0.82-3.2)	2.1 (1.6-2.6)	1.7 (0.82-2.9)	1.5 (0.79-2.4)	1.5 (0.83-2.5)	1.4 (0.79-2.2)
IL-8	3.8 (3-4.1)	3.5 (2.1-4.3)	3.8 (2.6-4.2)	3.4 (3.2-4.2)	3.4 (2.1-4.1)	3.2 (2.8-3.7)	3.3 (2.6-3.9)	3.3 (3.1-3.7)
MCP-1	2.5 (2.1-2.8)	2.3 (2-3.1)	2.7 (1.7-3.4)	2.6 (1.9-3.1)	2.5 (1.6-2.9)	1.8 (1.6-2.9)	2 (1.9-2.6)	2.4 (1.5-2.9)
TNF- α	2.2 (1.6-2.6)	2.4 (0.82-3)	2.6 (1.6-2.7)	2.2 (1.8-3)	1.8 (0.82-3.2)	1.4 (0.75-2.5)	2.2 (0.66-2.5)	2.2 (0.75-2.6)
MIP-1 β	1.6 (0.86-1.9)	1.3 (0.79-2.1)	1.7 (0.82-2.2)	1.8 (0.82-2)	1.4 (0.82-1.8)	1 (0.79-1.5)	1.1 (0.66-1.8)	1.1 (0.79-1.5)
IL-12/23p40	1.5 (1-1.9)	1.3 (0.53-2.2)	1.7 (0.82-2)	1.5 (0.13-2.2)	1.3 (0.16-1.8)	1.1 (0.12-1.7)	1.1 (0.66-1.6)	1.4 (0.79-1.5)
IL-18	3.5 (2.8-3.8)	3.4 (2.6-3.7)	3.2 (2.8-4)	3.7 (3-3.9)	3.5 (2.1-4.1)	3.2 (2.2-3.8)	3.3 (2.6-3.9)	3.1 (2.8-3.5)
IL-15	1.9 (1.4-2.1)	1.6 (0.92-2.1)	1.7 (1-2.1)	2 (1.5-2.2)	1.9 (0.82-2)	1.7 (0.85-2.1)	1.8 (1.2-2.2)	1.7 (1-2.1)
IL-5	0.69 (0.32-1.6)	0.84 (0.26-2.4)	0.86 (0.62-2.9)	1.4 (0.82-2.7)	0.77 (0.32-1.4)	0.7 (0.26-1.4)	0.92 (0.62-1.2)	0.6 (0.39-0.92)

¹Values were log-transformed and compared to baseline using one-way ANOVA with Bonferroni post-test.

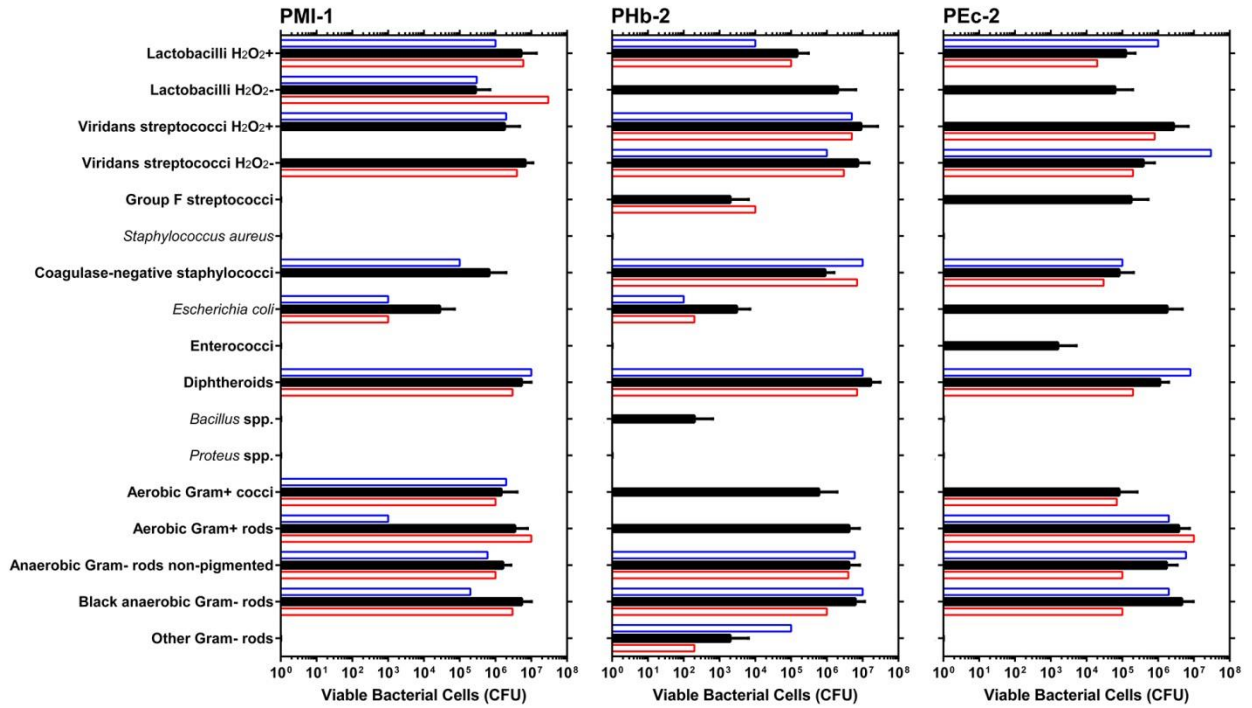


FIG. S1. Enumeration of vaginal facultative and anaerobic microbiota recovered from *M. nemestrina* ($N = 3$) during the course of the TDF-FTC IVR study. PMI-1, PHb-2, and PEc-2 represent subject IDs; blue bars, sample collected prior to IVR insertion; black bars, five samples (mean + SD) collected with IVR in place; and red bars, sample collected three days following IVR removal.

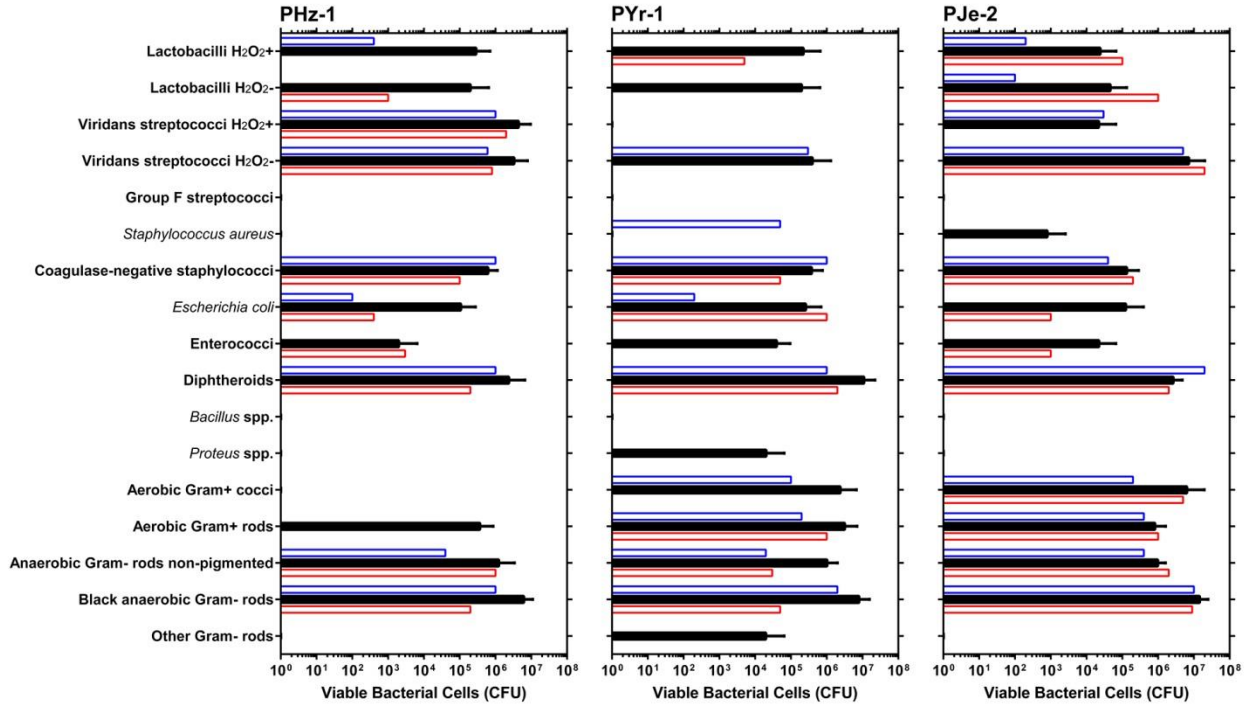


FIG. S2. Enumeration of vaginal facultative and anaerobic microbiota recovered from *M. nemestrina* ($N = 3$) during the course of the TDF-FTC-MVC IVR study. PHz-1, PYr-2, and PJe-2 represent subject IDs; blue bars, sample collected prior to IVR insertion; black bars, five samples (mean + SD) collected with IVR in place; and red bars, sample collected three days following IVR removal.