

**Table S1.** Quantities and ranges of inflammatory mediators detected in each vaginal swab at baseline.

<b>Inflammatory mediator<sup>#</sup></b>	<b>N (%) below highest standard</b>	<b>N (%) above lowest standard</b>	<b>N (%) above detection</b>	<b>Median* (IQR), log<sub>10</sub> scale</b>	<b>Highest standard, log<sub>10</sub> scale</b>	<b>Lowest standard, log<sub>10</sub> scale</b>	<b>LLOD, log<sub>10</sub> scale</b>
<b>IL-6</b>	11 (92)	10 (83)	12 (100)	1.1 (0.6, 1.4)	2.00	0.26	-0.15
<b>IL-8</b>	6 (55)	11 (100)	11 (100)	2.9 (2.5, 3.1)	3.00	0.70	0.70
<b>IL-1ra</b>	11 (92)	12 (100)	12 (100)	2.6 (2.5, 3)	3.30	1.56	1.26
<b>IP-10</b>	10 (83)	12 (100)	12 (100)	1.7 (1.2, 2.1)	2.70	0.95	0.65
<b>RANTES</b>	12 (100)	0 (0)	7 (58)	-	3.30	1.56	0.82
<b>SLPI</b>	11 (92)	10 (83)	10 (83)	2.2 (1.5, 2.4)	2.70	1.40	1.40

Standards represent kit standard range for each enzyme linked immunosorbent assay (ELISA).

Abbreviations: N, number of participants; IQR, interquartile range; LLOD, Lower limit of detection; CI, confidence interval; IQR, inter-quartile range; IL-6, interleukin 6; IL-8, interleukin 8, IL-1ra, interleukin-1-receptor antagonist; IP-10, Interferon- $\gamma$ -inducible protein 10; RANTES, regulated on activation, normal T cell expressed and secreted; SLPI, secretory leukocyte protease inhibitor.

\*Median (IQR) only reported for those with greater than 50% above detection and at least 50% between highest and lowest standard.

<sup>#</sup>Units for IL-6, IL-8, IP-10, RANTES: pg/ml. Units for SLPI, IL1-ra: ng/ml.

**Figure S1.** Overall correlation heatmap of quantities of vaginal bacteria and inflammatory mediators. Statistical significance by linear mixed effects models with random intercepts for each pair of measures in the correlation triangle is indicated by + for nominal significance only, and by \* for significance both at the nominal level and after accounting for multiple comparisons using Simes' method. The color scale at the bottom of the figure indicates the range of correlations from -1 (blue) to 1 (red). Correlations positive in value indicate a positive association between the variables, whereas correlations negative in value indicate an inverse association. Variables with green squares are indicative of no correlation observed in this comparison. Only subject data with both microbiota and inflammatory mediator samples (n=12) were included in this analysis. Abbreviations: L-iners, *Lactobacillus iners*; L-jens, *Lactobacillus jensenii*; L-crisp, *Lactobacillus crispatus*; G-vag, *Gardnerella vaginalis*; BR16S, references total bacterial load by broad-range 16S rRNA gene qPCR; IL-6, interleukin 6; IL-8, Interleukin 8, IL-1ra, interleukin-1-receptor antagonist.

