were used to evaluate associations between TV acquisition, detection of bacterial species, and total vaginal bacterial load. **Results** There was no association between total vaginal bacterial load, species diversity, or richness, and likelihood of TV acquisition. Detection of *S. sanguinegens* (odds ratio [OR] 4.00, 95% CI 1.19–13.50) and *P. amnii* (OR 3.45, 95% CI 1.29–9.24) were both associated with TV acquisition. *M. inodorus* was also associated with TV acquisition (OR 2.47, 95% CI 0.88–6.93), although not significantly. Compared to women with none of these species, women with all three bacterial species had substantially higher likelihood of TV acquisition (non-reference category; one-OR 1.57, 95% CI 0.21–11.86; two-OR 4.50, 95% CI 0.93–21.76; three-OR 5.50, 95% CI 1.15–26.40). There was no association with the other three bacterial species. **Conclusion** The presence of three bacterial species commonly associated with BV may increase susceptibility to TV infection. Elimination of these bacteria could be explored as an approach to decrease women’s risk of trichomoniasis.

**004.2** EFFECTS OF OVER-THE-COUNTER LACTIC ACID-CONTAINING VAGINAL DOUCHING PRODUCTS ON THE VAGINAL MICROBIOTA

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**Introduction** Of female visitors to the STI clinic in Amsterdam, 31% report use of vaginal cleansing products (including douches). Vaginal douching may negatively affect vaginal microbiota compositions (VM). We report the effect of intra-vaginal douching on the VM in a prospective study. **Methods** Through advertisements, we recruited 25 healthy women, aged 18–36 years, from 2015–2016. Participants were followed over 3 menstrual cycles and were instructed to use an intra-vaginal lactic-acid-containing douche 3 times a week during the 2nd cycle. Participants self-collected a median of 68 [IQR: 64–68] vaginal swabs. Baseline characteristics were collected through questionnaires. All participants kept a daily diary in which they reported douching, menstruation, sexual activity, etc. VM were assessed by 16S rRNA (V3-V4 region) sequencing. Associations between douching and VM were assessed by multivariable logistic regression, using generalised estimating equations to account for multiple observations within the same individual. **Results** As of December 2016, a median of 42 [IQR:40–44] vaginal swabs from 10/25 women were analysed. These 10 women had a median age of 25 years [IQR: 21.8–29.3], 9 women were Dutch-Caucasian, 9 used hormonal contraceptives and all were highly educated. At baseline, 8 women had lactobacilli-dominated VM (*Lactobacillus crispatus* (n=6), *L. iners* (n=1) or *L. iners/L. jensenii* (n=1)) and 2 women had poly-bacterial Gardnerella vaginalis-containing VM (GV-VM). The latter 2 women continued to have GV-VM throughout the study period. The VMs of 2 women, dominated either by *L. crispatus* or *L. iners* at baseline, shifted to GV-VM during the 2nd cycle, which persisted in the 3rd cycle. Having GV-VM was more likely in the 2nd and 3rd cycle, compared to the 1st cycle, after adjusting for sex and menses (odds ratio [OR] =1.7 (95% CI: 0.9–3.1) and OR=2.1 (95% CI: 0.7–6.1), respectively), though not statistically significantly so. **Conclusion** Our interim analyses suggest that regular intra-vaginal douching may promote a shift from lactobacilli-dominated VM to GV-VM.