Enterobacteriaceae in the PLZ group with a PLZ MIC of 4 μg/mL (6/6) were eradicated at TOC (Table 2). Across 49 patients with concurrent bacteremia, 100% (N = 49) of Enterobacteriaceae were cleared from the blood at TOC in the PLZ and MEM groups, respectively.

Conclusion. PLZ demonstrated comparable or higher microbiological eradication rates compared with MEM for common Gram-negative uropathogens, including resistant pathogens. The results support PLZ as a potential treatment option for cUTI, including A. baumannii Enterobacteriaceae with PLZ MICs of ≤4 μg/mL.

Methods. In August 2017, select jurisdictions were funded to collect urogenital and extragenital specimens from men and women with cUTI to inform treatment recommendations. Positive gonorrhea and/or chlamydia cultures were sent to regional laboratories for antimicrobial susceptibility testing (AST) by agar dilution. Isolates with elevated minimum inhibitory concentration (MIC) to azithromycin (AZI) (MIC ≥2.0 μg/mL), cefixime (CFX) (MIC ≥20.0 μg/mL), and/or ceftriaxone (CRO) (MIC ≥20.125 μg/mL) were designated as Alert isolates. Clinical and epidemiological data were linked to AST results.

Results. From August 2017 to February 2018, 4 clinics in 4 jurisdictions submitted 468 positive gonococcal specimens for AST. 36.1% were from men who had sex with men (MSM), 51.9% from men who had sex with women (MSW), and 12.0% from women. Overall, 71.8% were urethral, 7.9% endocervical, 7.1% rectal, and 13.2% pharyngeal. Seventy-two isolates (15.4%) were Alert: 97.2% (N = 70) had elevated MICs to AZI, 2.8% (N = 2) had elevated MICs to CFX, and none had elevated MICs to CRO. No isolate had elevated MICs to both AZI and CFX. Among MSM, 15.0% of extragenital isolates and 16.1% of extragenital isolates had an elevated AZI MIC. Among women, 24.3% of endocervical isolates and 26.3% of extragenital isolates had an elevated AZI MIC.

Conclusion. Preliminary eGISP data suggest that enhanced surveillance of pharyngeal, rectal, and endocervical isolates is feasible and that elevated MICs to azithromycin are common among males and females. Including isolates from extragenital anatomic sites and women may help strengthen current surveillance capacity.

Disclosures. All authors: No reported disclosures.

126. Robust and Persistent Vaginal Colonization with LACTIN-V Vaginal Lactobacillus crispatus Probiotic in a Double-Blind, Placebo-Controlled (DBPC) Phase 2b Trial to Prevent Recurrent UTI (rUTI)

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Background. We investigated vaginal colonization using repetitive sequence PCR (repPCR) and 16S RNA sequencing in a Phase 2b DBPC trial of a L. crispatus vaginal suppository probiotic for prevention of rUTI in premenopausal women.

Methods. Twenty-four young women with a history of rUTI and current culture-confirmed symptomatic UTI were enrolled and treated (Visit 0), then randomized (Visit 1) to either placebo or the probiotic arm, each for 4 months. All participants followed up during the 2-month probiotic/placebo intervention (Visits 2 to 4) and during 2 months following the intervention (Visits 5 and 6 post-intervention). At each visit, vaginal swab samples were collected for repPCR to determine the presence or absence of the L. crispatus arm.

Results. LACTIN-V vaginal suppository induced selective and sustained colonization in the probiotic but not the placebo recipients, as follows. Pre-intervention: (a) Probiotic arm: 100% of participants positive at one or more visits and (b) Placebo arm: 0% of participants positive at any time. (2) L. crispatus relative abundance, (a) Probiotic arm: 75% of all specimens, all visits, and (b) Placebo arm: 0% of all specimens, all visits. Post-intervention: (a) Probiotic arm: 75% of participants positive at Visit 5, 58% at Visit 6 and (b) Placebo arm: 0% of participants positive at Visits 5 and 6. (2) L. crispatus relative abundance, (a) Probiotic arm: 70% to 100% and (b) Placebo arm: below 5%.

Conclusion. LACTIN-V L. crispatus vaginal probiotic achieved robust and persistent colonization throughout 2 months of weekly dosing and for 2 months after the last dose in most participants.

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127. Urinary Tract Infection Incidence Is Associated with Recent Environmental Temperatures

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Background. Urinary tract infections (UTI) are one of the most common infections and the incidence of UTIs is seasonal, peaking in summer months. Relative to other times of the year, incidences of UTIs during this period is approximately 10% greater. Prior work has suggested that a cause of this seasonality may be warmer temperatures during summer months. However, this work focused on inpatients and used average monthly temperatures.

Methods. We identified all UTI cases located in 1 of 397 metropolitan statistical areas (MSA) in the contiguous United States between 2011 and 2016 using the Truven

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