weeks. Virologic response, adverse events (AEs), and laboratory abnormalities were evaluated.

**Results.** Across the two trials, 152 patients without cirrhosis and 16 with compensated cirrhosis received glecacrevir/pibrentasvir for 8 and 12 weeks, respectively. Baseline demographics are shown in Tables 1 and 2. The overall intention-to-treat (ITT) SVR12 rate was 98.2% (165/168) with no virologic failures among non-cirrhotic patients treated for 8 weeks; mITT rate (excluding non-virologic failures) was 99.4% (167/168). Reasons for nonresponse were breakthrough (n = 1; patient with incomplete study drug adherence), premature study drug discontinuation (n = 1), and missing SVRL (n = 1). SAFT analyses included the first 18 non-cirrhotic GT1 infected patients treated for 12 weeks (all achieved SVR12). AEs occurring in ≥5% of patients were fatigue, headache, nausea, and nasopharyngitis. Serious AEs and AEs leading to discontinuation were rare; none were related to study drug, Grade 3 or 4 laboratory abnormalities were infrequent. All patients maintained HIV-1 supression (<200 copies/mL) during treatment.

**Conclusion.** Glecacrevir/pibrentasvir was highly efficacious and well tolerated in patients co-infected with HCV GT1–6/HIV-1 without or with cirrhosis following 8 or 12 weeks of treatment, respectively, and could be the first 8-week pan-genotypic treatment option for HCV/HIV-1 co-infected patients without cirrhosis.

**Table 1. Baseline Demographics and Disease Characteristics**

| Characteristic                        | Without Cirrhosis | With Cirrhosis |
|---------------------------------------|-------------------|---------------|
| **8 Weeks**                            | **12 Weeks** |
| Make (n)                              | 127 (94)         | 124 (94)      |
| Age, median (range, years)            | 50 (21–76)       | 50 (21–76)    |
| CD4 count, median (range, cells/mm3)  | 489 (154–1203)   | 489 (154–1203)|
| HCV RNA level, log10 IU/mL            | 6.03 (4.41–7.03) | 6.03 (4.41–7.03)|

**Table 2. Baseline Antitremor Therapy**

| Characteristic                        | Without Cirrhosis | With Cirrhosis |
|---------------------------------------|-------------------|---------------|
| **8 Weeks**                            | **12 Weeks** |
| Antitremor therapy, n (%)             | 3 (%)            | 0 (%)         |
| Safe/avergae arch, n (%)              | 48 (32)          | 48 (32)       |
| Lipid & protein & CHO (%)             | 32 (32)          | 32 (32)       |
| Lipid & protein & CHO (%)             | 32 (32)          | 32 (32)       |

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1966. Evaluating a Prototype Microbiome Health Index (MHI) as a Measure of Microbiome Restoration Using Data Derived From a Published Study of Fecal Microbiota Transplant (FMT) to Treat Recurrent Clostridium difficile Infections (rCDI)

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**Background.** There are efforts to develop FDA-approved microbiota-based drugs to restore the microbiota, notably for recurrent Clostridium difficile infections (rCDI). Given the lack of established biomarkers for microbiome restoration, we are evaluating unidimensional Microbiome Health Indices (MHI). We previously presented a prototype MHI for clinical trials of RBX2660—a standardized microbiota restoration therapy in Phase 3 clinical development. Herein we assessed MHI for a published study of fecal microbiota transplant (FMT) for treating rCDI.

**Methods.** The prototype MHI is based on the associations of Bacteroidia and Clostridia with colonization resistance, and Gammaproteobacteria and Bacilli with dysbiosis, and Receiver Operating Characteristic analysis of pooled RBX2660 trials. AEs and serious AEs for patients before treatment (baseline) are distinguished from the healthier RBX2660 profile with an odds ratio of 121 (AUC = 0.99 sensitivity = 0.96, specificity = 0.99, cutpoint = 8.2). MHI data for the published FMT cohort were calculated using publicly available data derived from pre- and post-treatment fecal samples (Khanna S, et al. Microbiome 2017 5:55), and this study included patients with or without a co-diagnosis of inflammatory bowel disease (IBD).

**Results.** At baseline, 92% of patients in the FMT cohort were below the MHI = 8.2 cutpoint, consistent with a rCDI diagnosis. Among FMT responders 7 days after treatment, 91% of patients had shifted to MHI > 8.2 (P < 0.001 compared with baseline). Likewise, a significant shift was observed from baseline to 30 days (P < 0.0001), with 83% having MHI > 8.2. There were insufficient patients to support a statistical comparison of BID vs. no BID, but MHI trends lowered at all time points among patients with IBD.

**Conclusion.** MHI parameters derived from RBX2660 trials were predictive of pre- and post-treatment states for a published cohort of FMT-treated rCDI patients, suggesting that this tool may represent a useful dysbiosis measure beyond RBX2660 trials. Lower MHI among patients co-diagnosed with IBD suggests the potential utility of MHI beyond rCDI. Collectively our results continue to support the utility of MHI and its prospective evaluation in ongoing Phase 3 clinical trials.

**Disclosures.** K. Blount, Rebiotix, Inc.: Employee, Salary. C. Jones, Rebiotix, Inc.: Employee, Salary. E. Deych, Rebiotix, Inc.: Research Contractor, Consulting fee. B. Shannon, Rebiotix, Inc.: Research Contractor, Consulting fee.
Our objective was to examine whether an PCT algorithm compared with standard practice would reduce antibiotic exposure in patients with LRTI (pneumonia and acute exacerbations of chronic obstructive pulmonary disease (AECOPD)) in an American urban academic hospital.

**Methods.** From April 17, 2017 until November 1, 2017, consecutive patients admitted to a medicine service were enrolled in the PCT intervention if they were receiving antibiotics for LRTI and gave consent. Providers were encouraged to discontinue antibiotics using a PCT algorithm with predefined cutoffs. Serum PCT was measured in the hospital laboratory once daily. Results and recommendations were communicated to providers by study team and in the medical record. Control patients were selected by reviewing charts for patients admitted to a medicine service for LRTI from December 1, 2016 to April 16, 2017. The primary endpoint was median antibiotic duration.

**Results.** 174 patients were enrolled in the intervention group and 280 patients in the control group. Intervention group providers complied with the PCT algorithm in 75% of encounters. The rate of overall adverse outcomes was similar in PCT and control groups (21.8% vs. 23.5%; difference, −0.02; 95% CI, −0.10 to 0.07). PCT-guided therapy reduced the median antibiotic duration for pneumonia from 7 days to 6 (P = 0.05), and AECOPD from 4 days to 3 (P = 0.01). Noncompliance with the PCT algo-

**Conclusion.** In our center, 75% adherence to a PCT-guided algorithm safely reduced the duration of antibiotics for treating LRTI. Incentivizing providers to comply with PCT-guided algorithms could lead to further reductions in antibiotic use.

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