

**Conclusion.** The once daily regimen of boosted DRV and DTG was effective at achieving or maintaining virologic suppression with no significant adverse events. This regimen offers another viable option for patients unable to tolerate NRTIs.

**Disclosures.** J. Verna, Janssen Pharmaceuticals, Inc.: Investigator, Research support.

#### 554. Does Protease Inhibitor (PI) Monotherapy Select Primary PI Resistance?

Christopher Saling, MD<sup>1</sup>; Liana Atallah, MPH<sup>2</sup>; Tyler Haddad, BS, BA<sup>3</sup>; Brooke Learned, BS<sup>3</sup> and Jihad Slim, MD<sup>4</sup>; <sup>1</sup>Internal Medicine, St. Michael's Medical Center, Newark, New Jersey, <sup>2</sup>St. George's University, St. George's, Grenada, <sup>3</sup>University of New England College of Osteopathic Medicine, Biddeford, Maine, <sup>4</sup>Infectious Disease, St. Michael's Medical Center, Newark, New Jersey

**Session:** 60. HIV: Antiretroviral Therapy  
Thursday, October 4, 2018: 12:30 PM

**Background.** Combination drug therapy is the standard of care for HIV treatment. PI monotherapy is considered experimental in the United States. However, some patients end up receiving PI monotherapy secondary to resistance and/or drug intolerance to other antiretroviral (cART) classes. This study will discuss real-life clinical results in patients on PI monotherapy and examine the potential for the development of primary PI mutations.

**Methods.** An observational retrospective study conducted in an inner-city HIV clinic identified 10 patients on PI monotherapy who each had two GenoSure Archive® (Labcorp) resistance profiles performed. Gender, race, prior cART, and baseline VL and CD4+ count were captured. VL and CD4+ count were trended in the time period between resistance tests. These profiles were then compared checking for the emergence of new primary PI mutations.

**Results.** Seven out of 10 patients were African American, two were Hispanic, one was Caucasian, and half were male. The mean time interval between archived resistance tests was 6.87 months. During the time between resistance profiles, nine were on darunavir and one switched from lopinavir to darunavir for less pill burden. Eight had an undetectable VL (defined by <50 copies/mL) at the first resistance test, seven had undetectable VL at the second resistance test, and six remained undetectable over the entire period between profiles. There were three that demonstrated blips in VL and one that experienced virological failure between the two sets of resistance tests. One patient had an initial resistance profile showing primary resistance to lopinavir. No patients gained any primary PI mutations to darunavir.

**Conclusion.** The results of this study suggest that mainly darunavir-based PI monotherapy has good genetic barrier, even in the setting of virological failure. Larger studies examining similar data over longer durations are needed to confirm this finding.

**Disclosures.** All authors: No reported disclosures.

#### 555. Characteristics of HIV+ Patients Prescribed Raltegravir QD in the United States

Philip Lackey, MD<sup>1</sup>; Kathy Schulman, MA<sup>2</sup>; Jennifer Fusco, BS<sup>2</sup>; Jean Marie Arduino, ScD, MS<sup>3</sup>; Girish Prajapati, M.B.B.S., MPH<sup>3</sup> and Gregory Fusco, MD, MPH<sup>2</sup>; <sup>1</sup>Atrium Health, Charlotte, North Carolina, <sup>2</sup>Epidivian, Inc., Durham, North Carolina, <sup>3</sup>Merck & Co., Inc., Kenilworth, New Jersey

**Session:** 60. HIV: Antiretroviral Therapy  
Thursday, October 4, 2018: 12:30 PM

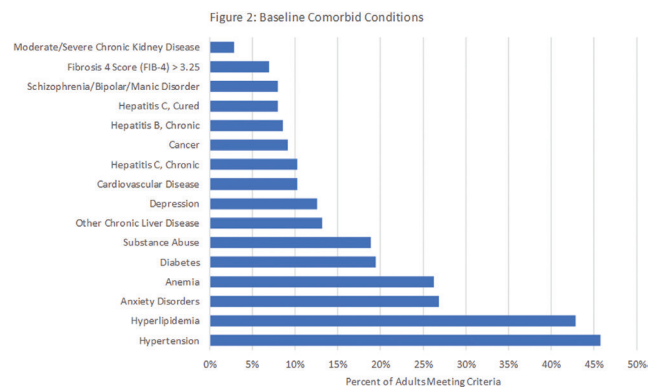
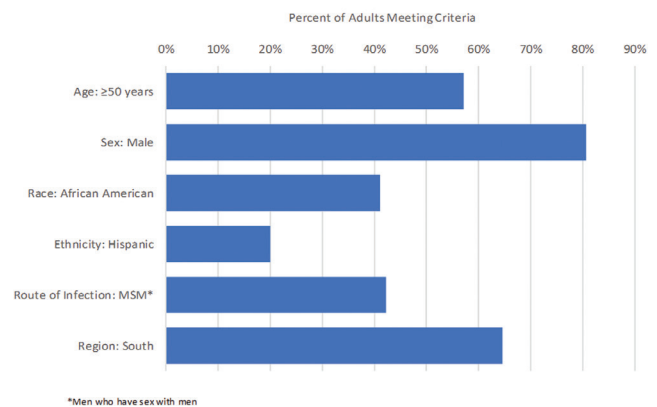
**Background.** Raltegravir (RAL) 400 mg twice-daily (RAL BID) has been an integral part of antiretroviral therapy (ART) in both ART naive and experienced HIV-1 infected patients for the last decade. In 2017, RAL 1,200 mg (2 × 600 mg), a once-daily formulation (RAL QD) was approved. The objective of this study was to characterize the early utilization of RAL QD in the United States.

**Methods.** This is an ongoing cohort study of HIV-1 infected adults with ≥1 prescription for RAL QD in the OPERA Observational Database, the product of a collaboration of HIV caregivers in 84 clinics across 17 states following over 80,000 people living with HIV through their prospectively collected electronic medical records. Baseline demographic, clinical and laboratory characteristics of patients who initiated RAL QD between July 1 and December 31, 2017 (study window) were analyzed using descriptive statistics.

**Results.** A total of 175 patients were prescribed RAL QD during the study window; 57.1% of whom were ≥50 years of age, 80.6% male, 41.1% African American, and 20.0% Hispanic (Figure 1). RAL QD was most often given with emtricitabine/tenofovir (TDF or TAF): 56.0%, abacavir/lamivudine: 8.0%, and darunavir/cobicistat: 4.6%. Twelve patients (7%) were ART naive, 45 (26%) switched from non-RAL-based regimens, and 118 patients (67%) were previously on RAL BID, most of whom (86%) had no other regimen changes other than switching to RAL QD. A majority (80%) of patients initiated RAL QD with a viral load <200 copies/mL; 68.6% were suppressed to <50 copies at baseline. Similarly, 77.1% had CD4 counts >350 cells/mm<sup>3</sup>; 64.0% >500 cells/mm<sup>3</sup>. Overall, a third of patients had a history of an AIDS-defining illness. Eighty-one percent of patients had at least one of the comorbidities depicted in Figure 2; 45.7% with hypertension, 42.9% hyperlipidemia, 26.7% anxiety disorders, 26.3% anemia and 19.4% with diabetes. The median number of prescriptions for concomitant medications prescribed with RAL QD regimens was 5 (IQR: 4–8).

**Conclusion.** Early initiators of RAL QD are primarily treatment-experienced individuals, older than 50 years of age with virologic and immunologic control, significant comorbid conditions and the burden of medications that treat those conditions.

Figure 1. Baseline Demographic and Clinical Characteristics



**Disclosures.** J. Fusco, Epidivian, Inc.: Employee, Salary. Merck & Co.: Merck contracted research with my employer, Epidivian, Inc., Employer received funding for research. J. M. Arduino, Merck Sharp & Dohme Corp: Employee and Shareholder, Salary. G. Prajapati, Merck & Co., Inc.: Employee and Shareholder, Salary. G. Fusco, Epidivian, Inc.: Employee, Salary. Merck & Co.: Merck research contract with Epidivian, employer received funding to perform analysis.

#### 556. Factors Associated with Integrase Strand Transfer Inhibitor Use Between 2008 and 2015

Jane O'Halloran, MD, PhD; John Sahrman, MA; Margaret A. Olsen, PhD, MPH and William Powderly, MD<sup>1</sup>; <sup>1</sup>Washington University School of Medicine, Division of Infectious Diseases, St Louis, Missouri

**Session:** 60. HIV: Antiretroviral Therapy  
Thursday, October 4, 2018: 12:30 PM