WHAT INFLUENCES SWITCHING TO DTG/3TC VS B/F/TAF IN CLINICAL PRACTICE?

Authors: Paul E. Sax, Joseph J. Eron, Janna Radtchenko, Megan Dunbar, Joshua Gruber, Moshe Friedman, Steven Santiago, Moti Ramgopal, Karam Mounzen, Gregory Huhn, Richard A. Elion

Institutions: 1Brigham and Women's Hospital and Harvard Medical School, Boston, MA, USA, 2University of North Carolina at Chapel Hill, Chapel Hill, NC, USA, 3Tri Health, Louisville, CO, USA, 4Gilead Sciences, Foster City, CA, USA, 5AMF Consulting, Los Angeles, CA, USA, 6Care Resource, Miami, FL, USA, 7Midway Immunology and Research Center, Fort Pierce, FL, USA, 8School of Medicine at the University of Pennsylvania; Philadelphia Fight Community Health Institutions, Philadelphia, PA, USA, 9The Ruth M. Rothstein Core Center, Rush University Medical Center, Chicago, IL, USA

BACKGROUND

• Both B/F/TAF and DTG/3TC are recommended in treatment guidelines for both initial and switch therapy in people with HIV (PWH).

• Understanding clinical and socio-demographic drivers of switching to DTG/3TC or B/F/TAF is critical when comparing outcomes from real-world studies, as individual baseline characteristics could impact efficacy.

METHODS

• Retrospective study with Trio Health HIV Network EMR data.

• Eligibility: ≥18 yrs., switched to B/F/TAF or DTG/3TC after DTG/3TC approval (4/2019–6/2022).

• Baseline characteristics were compared (chi-square, t-test).

• Logistic regression predicted probability of prescribing DTG/3TC given baseline characteristics (propensity scores, PS).

• Logistic regression identified primary predictors of prescribing DTG/3TC.

RESULTS

• 6996 PWH switched to either DTG/3TC (16%) or B/F/TAF (84%). PWH prescribed DTG/3TC vs B/F/TAF differed in key characteristics: HIV related (baseline viral suppression, CD4), adherence related (age, payer), and toxicity related (baseline eGFR, body mass index (BMI), hyperlipidemia, hypertension, osteoporosis, renal disease, alcohol or substance use, prior INSTI use [Table 1].

• 34% of DTG/3TC group switched from DTG-containing regimens (vs 13% B/F/TAF group), 29% switched from ABC (vs 6%), 25% from Efavirenz (vs 33%), 13% from BIC (vs 0%), 3% from RAL (vs 5%), all p<0.05.

• Multivariable logistic regression identified primary predictors for prescribing DTG/3TC over B/F/TAF: prior INSTI (odds ratio [OR]=2.4), CD4>200 cells/mm³, PS).

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CONCLUSIONS

• While most PWH were prescribed B/F/TAF, there were multiple significant differences in patient characteristics between PWH switching to DTG/3TC or B/F/TAF.

• B/F/TAF prescription was associated with factors that reflect more advanced HIV clinical parameters and potential poor adherence (e.g., CD4<200, substance use). By contrast, prescribing DTG/3TC was associated pre-existing renal dysfunction and obesity.

• Differences in prior INSTI use favoring switch to DTG/3TC largely represent switches off other DTG-containing regimens.

• Differences in payer distribution by regimen could be indicative of differences in socio-economic status that warrant further exploration.

• These results suggest that although they are both guideline-recommended regimens, clinicians do not perceive them as equally appropriate for all patients.

• Accounting for channeling bias in observational studies evaluating outcomes is essential for interpreting differences in efficacy between regimens.

Figure 1 Characteristics associated with prescribing DTG/3TC vs B/F/TAF

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