Trends in HIV Antiretroviral Tablet Burden in Treatment Naïve Patients in the United States

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RESULTS

The standard of care for antiretroviral therapy (ART) in ART-naïve, HIV+ patients requires a regimen which contains at least three active drugs from two or more classes.

- Regimen selection is based on virologic efficacy, the potential for adverse effects and drug-drug interaction, pill burden, cost, comorbid conditions and social determinants. These factors are of increasing importance as the focus of therapy shifts from the preservation of life to the lifelong treatment of a chronic condition.

- Typically, initial therapy consists of two nucleoside/nucleotide reverse transcriptase inhibitors (NRTI) combined with a third agent such as an integrase strand transfer inhibitor (INSTI), a non-nucleoside reverse transcriptase inhibitor (NNRTI), or a protease-boosted protease inhibitor (PI). The recommended regimen may be prescribed as a single STR or multi-pill MTR regimen, the latter either as a 2 pill, once a day, regimens (2-PI pill MTR) or as a 3 pill per day regimen (3-PI pill MTR).

- Meta-analyses have suggested that patients initiating on an STR are more adherent, more likely to achieve viral suppression and less likely to be hospitalized. Within the number of STR available to clinicians has increased notably since 2011, annual trends in tablet burden and quality metrics have not been well studied.

- Time trends in ART tablet burden and quality metrics in a national sample of ART naïve burden and patients.

OBJECTIVE: To describe trends in ART pill burden and quality metrics in a national sample of ART naïve patients.

Figure 1. ART Tablet Burden Among ART Naïve Patients Initiating ART in a Community Setting between 2007 and 2016

Figure 2a. Percent of ART Naïve Initiators with a new ADE in Community Setting between 2007 and 2016, by Payer

Figure 2b. Percent of ART Naïve Initiators Initiating ART on an STR in a Community Setting between 2007 and 2016, by Payer

DISCUSSION

- There has been a significant trend towards prescribing ART with a lower pill burden in the last decade. More than two-thirds of naïve patients initiated on an STR in 2014.

- Trends are consistent across payers although adoption of STR is highest among patients with Ryan White/HIV-CARE or a commercial payer and lowest among those with Medicare/Medicaid.

- Changes in decision prescribing preference since 2011, the introduction of alternate STR formulations, comprised of either NNRTIs or boosted PI based regimens, has resulted in a shift away from PI based regimens which are available as MTRs.

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REFERENCES


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