**RESULTS:**

- **In the large cohort, DTG showed an optimal efficacy and tolerability, with a low rate of discontinuations over the first year of treatment, both in ART-naive and ART-experienced patients. In ART-experienced population, starting DTG as part of a two-drug regimen was associated with a lower risk of discontinuation compared to switching to a standard triple regimen, possibly due to more options being left in those 3 drugs regimens. However, confounding by indication cannot be ruled out and we aim to perform this comparison after further follow-up is cumulative.**

**CONCLUSIONS:**

- "DTG was now one of the most widely used antiretroviral drugs for treatment of both ART-naive and ART-experienced HIV patients due to its high efficacy and low potential for drug interactions."  
  
- "High-top tolerance demonstrated in clinical trials and recent observational studies have raised concerns about DTG safety, especially with regard to neurocognitive adverse events, with a higher incidence when DTG was used to abacavir (ABC) and in frail subgroups, as women and older patients. However, these data was not uniformly confirmed in real life settings."  
  
- "The aim of this study is to estimate the risk of virologic failure and discontinuation of DTG-based regimens in virologically-naive and experienced HIV patients in a large Italian cohort."

**METHODS:**

- **Retrospective, observational, multicentric study.** Data analysis was based on an international network short including HIV patients, naive from ART, prospectively followed in 52 Italian centers.

- **Both ART-naive and virologically-suppressed (baseline HIV RNA ≤ 50 copies/ml) treatment-experienced (TE) HIV patients enrolled in Icona cohort who initiated, for the first time, a DTG-based regimen from January 2015 to July 2017 were included.**

- **DEFINITIONS:**
  - Virologic failure (VF): two consecutive HIVRNA>50 copies/ml, for naïve patients, occurring 26 months after DTG start.
  - DTG discontinuation (DTG-TO): discontinuation of DTG from the regimen.

- **STATISTICAL ANALYSIS:**
  - Characteristics at time of DTG start (baseline) were compared between naïve and TE patients using chi-square and non-parametric tests for the median as appropriate.
  - Cumulative probability of VF and DTG-TO for any reason and for toxicity were estimated by Kaplan-Meier analysis in both naïve and TE patients.

- **Predictive factors for DTG discontinuation for any reason and for toxicity identified using multivariable Cox proportional hazard model in both groups.**

**RESULTS:**

- **In the large cohort, DTG showed an optimal efficacy and tolerability, with a low rate of discontinuations over the first year of treatment, both in ART-naive and ART-experienced patients. In ART-experienced population, starting DTG as part of a two-drug regimen was associated with a lower risk of discontinuation compared to switching to a standard triple regimen, possibly due to more options being left in those 3 drugs regimens. However, confounding by indication cannot be ruled out and we aim to perform this comparison after further follow-up is cumulative.**

**CONCLUSIONS:**

- "DTG was now one of the most widely used antiretroviral drugs for treatment of both ART-naive and ART-experienced HIV patients due to its high efficacy and low potential for drug interactions. However, despite the high tolerance demonstrated in clinical trials and recent observational studies have raised concerns about DTG safety, especially with regard to neurocognitive adverse events, with a higher incidence when DTG was used to abacavir (ABC) and in frail subgroups, as women and older patients. However, these data was not uniformly confirmed in real life settings."  
  
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