



## Poster

## Session/Topic: Clinical HIV

### N. Title:

P 98 **Assessment of appropriateness of first-line combined antiretroviral treatment (cART): the preliminary results of Liguria experience V.E.L.A. study**

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### Abstract:

**Background:** The initial combined antiretroviral treatment (cART) for a naïve patient generally consist of two NRTIs, plus a drug from one of three class (an INSTI, an NNRTI, or a booster PI).

Recent observations described the pivotal role of this regimen: characterized by a low rate of discontinuation (due either to toxicity or virological failure). Moreover, the first line of treatment could be the target for lowering the cost-related treatment. The V.E.L.A. study team is composed by different professionals: physicians, pharmacists and pharmacoeconomic analysis experts. Aim of the study is to record the drug prescription and to define an appropriateness score.

**Material and Methods:** The study consists of a multicentre observational trial enrolling patients from 6 different( Sanremo, Albenga, savona, Galliera, San Martino-IST, La spezia) centers in Liguria. The cohort includes all patients who started the first antiretroviral treatment in 2016. The data has been gathered by a web-based platform which collected: demographics, laboratory tests, therapeutic lines and drug withdrawals. Each HIV treatment receives a score resulting from combining its relevance (according to current Italian guidelines at the time of prescription) and its related monthly cost. The most appropriate and less expensive regimen obtained a score of 1 point, while other are rated as declining progressively by 0,05 points according to their value based on the two parameters described above (range: 1-0,1). Furthermore, we followed the clinical course recording CD4 cell count and HIV viral load decay as a surrogate marker of quality of life.

**Results:** 103 patients were enrolled from 6 infectious diseases Department; there were 78 males and 25 females. According to the CDC classification there were A 41, B47, C15. The mean age was 40 years, 13 pts. were coinfecting with Hepatitis C virus. 23 patients presented a plasma HIV-RNA greater than 100.000 copies/ml, 45 patients had a CD4 count lower than 350 cell/mm<sup>3</sup>. Overall appropriateness score reached 0,91. Single Tablet Regimens (STR) rated a score of 0,99, while PI-Based and INI regimens presented a score of 0,36 and 0,93 respectively. Tenofovir fumarate-emtricitabine regimens achieved higher score vs. abacavir-lamivudine ones. Monthly therapy cost was € 776,3 per patients.

**Conclusions:** The score system proved to be an effective tool for monitoring the correlation of treatment choice and clinical outcomes. The higher the score, the better the outcomes, so in clinical practice it could be associated with a reduction in patients' management costs. Finally, further improvements might be observed by the introduction of new tenofovir alafenamide formulations and national guidelines releases.

