Background

We evaluated the virological response and the resistance profile (at baseline and at failure) in a large cohort of Italian virologically suppressed HIV-1 infected patients switching to a dual regimen containing INI.

Methods

Baseline patients’ characteristics: Overall, 248 (ART-treated patients virologically suppressed from a median time of 1.9 (IQ: 0.6-4.5) years and starting an INI-based dual treatment in 2015: IQR 2015-2016 were analysed.

Baseline resistance: Previous resistance to INIs was very low (<3%), though >64% of patients showed previous resistance to PIs, NNRTIs and/or NNRTIs, regardless the INI used at therapy switch.

Resistance after virological failure: Among patients experiencing virological failure, 12 were tested for resistance in a median (IQ) time of 11 (5-17) months after switch. INI resistance was detected in 7 (58.3%) patients (six under raltegravir, one under dolutegravir), 4 (33.3%) patients (all receiving raltegravir) accumulated further major resistance mutations to companion drugs (33.3% NNRTI, 33.3% NRTI, 8.3%; NRTI-8.3%). The majority of patients who accumulated new resistance had an intermediate/full resistance cGSS at baseline.

Conclusions

In pluri-treated virologically suppressed patients, switching to a dual therapy including dolutegravir or raltegravir ensures a high rate of virological control.

Being in stable virological suppression for at least 1 year, and having INI associated with a fully active companion drug, are factors linked to a greater rate of success.

This work was supported by an unconditional grant from ViV HealthCare.

Daniele Armenia1, Caterina Gori2, Federica Forberic3, Vanni Boghi4, William Gennari5, Ada Bertoli5, Alberto Giannetti6, Stefania Cicalini7, Annalisa Mondi8, Manuela Colafaligi9, Miriam Lichten9, Massimo Andreoni10, Cristina Mussini11, Andrea Antinoni12, Francesca Ceccherini-Silberstein13, Carlo Federico Perno14, Maria Mercedes Santoro15

1 Department of Experimental Medicine and Surgery, University of Rome "Tor Vergata", Rome, Italy; 2 Antiretroviral Therapy Monitoring Unit, IRCCS, Spallanzani, BCCN, 3CCN of Infectious Diseases, Politiy of Modena, Modena, Italy; 4 Mycology Laboratory, Polities of Modena, Modena, Italy; 5 Division of Infectious Diseases, National Institute for Infectious Diseases "L. Spallanzani", IRCCS, Spallanzani, Rome, Italy; 6 Department of Public Health and Infectious Diseases, La Sapienza University, Faculty of Medicine, Rome, Italy; 7 Infectious Disease Division, Polyclinic of Rome "Tor Vergata", Rome Italy.

References

1. The introduction of integrate inhibitors (INIs) has strengthened combined antiretroviral therapy (ART) due to their remarkable efficacy observed in both clinical trials and clinical practice.
2. The usage of INIs in treatment optimization strategies based on two drugs showed high rates of maintenance of virological suppression.
3. However, data about the role of baseline resistance profiles and viro-immunological factors on virological response are still new in clinical setting.