Background
Tenofovir alafenamide (TAF) in clinical trials demonstrated less impact than tenofovir disoproxil (TDF) in affecting renal and bone parameters, whereas TDF protects from hypercholesterolaemia and hypertriglyceridaemia.

Purpose
To analyse in clinical practice of human immunodeficiency virus-infected (HIV-infected), how renal function and fasting lipid parameters are modified when switching TDF to TAF. As a second aim, to evaluate effectiveness and the immunological system.

Material and methods
Retrospective observational study (July 2016 to August 2018) conducted in HIV-infected patients treated for ≥6 months with a TDF regime who switched to a TAF regimen kept >48 weeks. We considered virological success if HIV-1 RNA <35 copies/mL.

Demographic variables were registered. Follow-up variables: serum-creatinine, phosphataemia, glomerular filtration rate (GFR calculated by CKD-EPI), total cholesterol (TC), high-density-lipoprotein (HDL), low-density-lipoprotein (LDL), triglycerides, CD4 + cell counts and HIV RNA-concentration.

Two-sided t-student test was used for comparing pre-post variables except for GFR with two-sided Wilcoxon signed-rank test. We used Pearson correlation coefficient (r) evaluating the relation with TC and HDL-LDL.

Variables were extracted from: electronic clinical records (SAP) and the pharmacy-dispensation program (Silicon). The statistical data were analysed with SPSS.

Results
Forty-eight patients were included, mean age 44 years (range 21–70), 79.2% males. Most received antiretroviral treatment (ART) with efavirenz/etravirine/cobicistat (44/48).

There were significant differences from baseline to 48 weeks with serum-creatinine, TC, HDL and CD4+. Serum-creatinine decreased 0.08 mg/dL with TAF (0.98±0.18 mg/dL with TDF, p=0.0001); TC, HDL and CD4 were greater with TAF; difference 19.8 mg/dL (173.4 mg/dL with TDF, p=0.0001), 8.7 mg/dL (47.6 mg/dL with TDF, p=0.0001) and 76 cells/μL (694.2 cells/μL with TDF, p=0.02) respectively.

There were no significant differences with phosphataemia, LDL and TG, but all increased with TAF (difference 0.06, 8.03 and 10.77 mg/dL, concentration with TDF 3.31, 106 and 115.4 mg/dL respectively; p>0.05). There were no statistical differences with GFR (p>0.05).

Cholesterol correlated with LDL (p=0.0001; r=0.94), but not with HDL (p>0.05; r=0.03).

All patients achieved virological success, even three patients with RNA-concentration >35 copies/mL before switching.

Conclusion
After 48 weeks of patients, in clinical practice, who changed to TAF on their ART, 100% of patients archived virological suppression, with reduction in serum-creatinine and improvement in the immunological system. Nevertheless, hypercholesterolaemia was observed based mainly on LDL elevation.

REFERENCES AND/OR ACKNOWLEDGEMENTS
No conflict of interest.

Abstracts

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Background
HIV patients live longer, and as a result are more exposed to comorbidities and even earlier onset. This leads to a polypharmacy situation, with the consequent risk of adverse effects, interactions and lack of adherence.

Purpose
To describe the prevalence of comorbidities, polypharmacy and adherence in the HIV population with antiretroviral treatment (ART) over 65 years of age.

Material and methods
Retrospective observational study of the HIV population with ART of a third-level hospital, which between January and July of 2018 had an age of ≥65 years. Polypharmacy was defined as the use of six active ingredients (AI) or more, high polypharmacy using more than 11 and extreme polypharmacy using more than 21 AI (including ART). Demographic, clinical and pharmacotherapeutic characteristics were studied. Patients who took at least 90% of their prescribed ART were classified as good adherers. The comorbidities recorded were hypertension (HT), diabetes mellitus (DM), dyslipidaemia (DSP) and central nervous system (CNS) disorders. The sources of information used were electronic prescribing, clinical history and personal interviews.

Results
The patients that met inclusion criteria were 36, of which 77% were males and the mean age was 72.19 years (SD 5.69). Mean age at diagnosis was 57.08 years (SD 9.51). Five patients died during the study period and one did not want to participate, so 30 patients took part in the subsequent analysis. Regarding comorbidities: 56.7% of the patients suffered from HT, 26.7% from DM, 70% from DSP and 43.3% from any CNS-related pathology. Then, of the 30 patients interviewed, 90% presented with polypharmacy and 50% of those, a high polypharmacy situation. The average of concomitant AI was 7.4, however the average AI of the ART was 3.3. Finally, 86% were adherent patients.

Conclusion
The most prevalent comorbidity in this population was dyslipidaemia, followed by hypertension, from which can be deduced the greater cardiovascular risk they face. The polypharmacy of these patients can be explained through the concomitant drugs, because nowadays ART has been simplified. Despite this high degree of polypharmacy, adherence to ART is very good.

REFERENCES AND/OR ACKNOWLEDGEMENTS
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