

P0692 Trends in the prescription of antiretroviral drugs in Croatia, 2005-2017Josip Begovac¹, Iva Matkovic², Šime Zekan¹, Lukas Davorka²¹ School of Medicine, University of Zagreb, Zagreb, Croatia, ² University Hospital for Infectious Diseases Dr. Fran Mihaljevic, Zagreb, Croatia

Background: In Croatia, HIV-care including antiretroviral therapy (ART) is provided at a single institution, the University Hospital of Infectious Diseases (UHID) in Zagreb. We describe whether and when an apparent change in the trend in the prevalence of ART prescriptions occurred from January 2005 to December 2017.

Materials/methods: Included were all patients who have been given ART from the hospital pharmacy at UHID. ART was categorized: 1) 2NRTI+1NNRTI, 2) 2NRTI+1PI, 3) 2NRTI+1INSTI and 4) other combinations. The nucleoside backbone was categorized: 1) D4T+3TC, 2) ZDV+3TC, 3) TDF+FTC, 4) ABC+3TC and 5) other combinations including nucleoside-sparing regimens. For each calendar year the total number of person-years on ART was calculated and the percent of time spent on a particular drug combination was calculated. Trends are described by Annual Percent Change (APC) using the Joinpoint Regression Program.

Results: A total of 1296 (88.9% males) persons received ART at UHID in the period 2005-2017 with a total of 7216.8 person-years of follow-up. There were 226.0 person-years of therapy in 2005 and 1032.2 in 2017 (average annual increase=13.5%). The prevalence of standard 3-drug therapy (2NRTI plus one other agent of the NNRTI, PI or INSTI class) was >90% in each year except in 2017 when it was 88%. There have been significant changes in ART prescriptions particularly after 2015 with an increasing use of integrase inhibitors and non-standard ART (Figure). The use of NNRTI has decreased since 2015 whereas the use of PI had a decreasing trend since 2010 (Figure). Some of the ART prescriptions were influenced by cost and availability (TDF/FTC and ABC/3TC). There were 36 different combinations used by 265 patients in 2007 and 51 used by 1116 patients in 2017. Among non-standard combinations, use of lopinavir-monotherapy was most prevalent before 2015 (14.6% of person-years of non-standard ART usage), afterwards it was dolutegravir plus lamivudine (36.9%).

Conclusions: Our complete national data indicate significant changes in antiretroviral drug usage over time, particularly after 2015. Changes in ART were not abrupt. Among non-standard regimens non-NRTI or single-NRTI (3TC) ones were most prevalent indicating that they were prescribed mostly because of tolerability and side-effects.

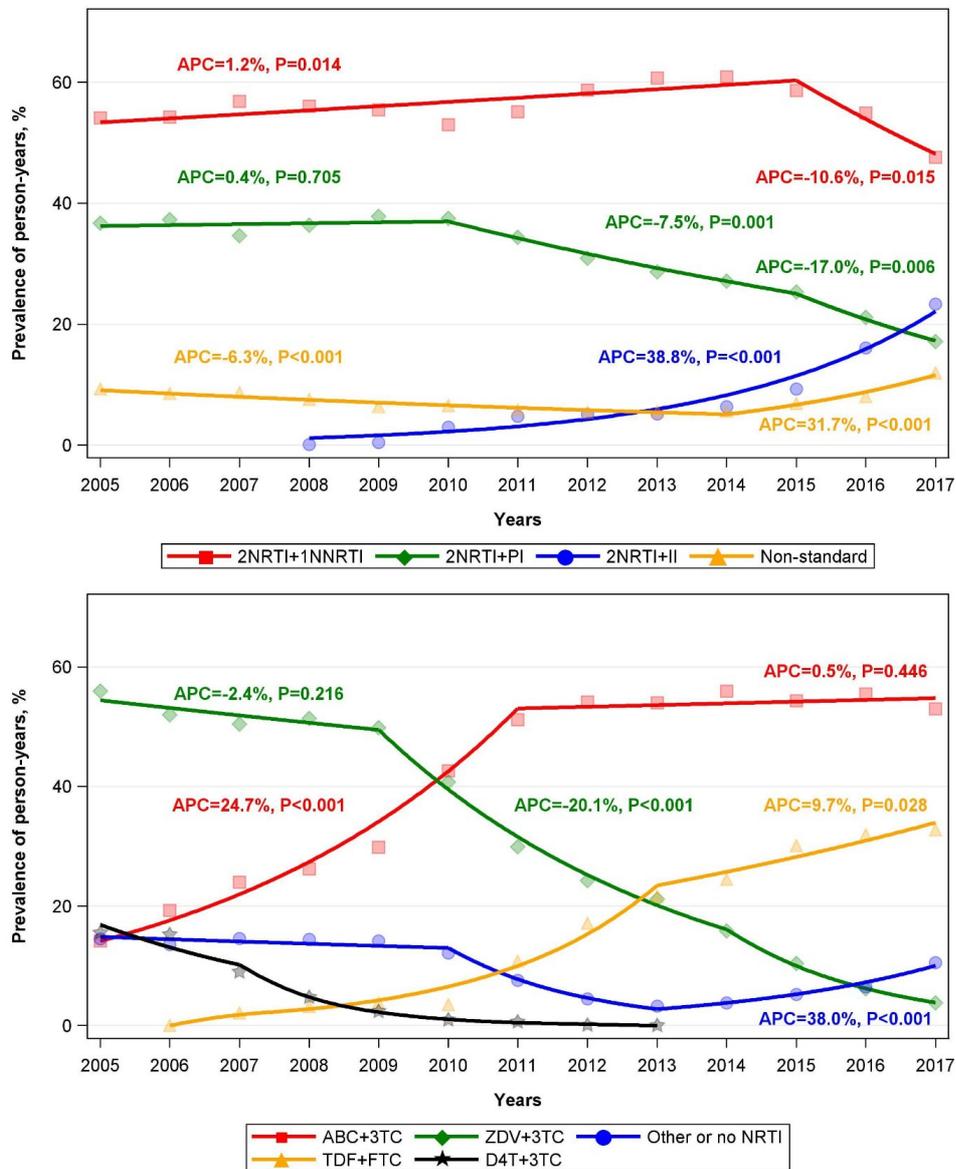


Figure. Prevalence of time spent on different antiretroviral drug combinations (top) and nucleos(t)ide backbone combinations (bottom), Croatia, 2005 to 2017.

APC, annual percent change; NRTI, nucleos(t)ide reverse transcriptase inhibitors; NNRTI, non-nucleoside reverse transcriptase inhibitors; PI, protease inhibitors; II, integrase inhibitors; ABC, abacavir; 3TC, lamivudine; ZDV, zidovudine; TDF, tenofovir disoproxil fumarate; FTC, emtricitabine; D4T, stavudine.

