Same-day initiation with bictegravir/emtricitabine/tenofovir alafenamide: real-life experience from a centralized single centre model of care for people living with HIV in Croatia

P155

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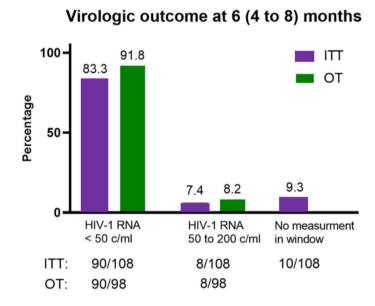


BACKGROUND: Bictegravir/emtricitabine/tenofovir alafenamide (B/F/TAF) is a recommended first-line antiretroviral (ART) regimen.¹ Croatia has centralized care for people living with HIV (PLWH), with all persons treated in a single center, preferably in a same-day initiation model whenever suitable.² This retrospective cohort study evaluated ART-naïve PLWH who initiated B/F/TAF in a same-day model.

METHODS: We collected information from the electronic database of the Croatian HIV Reference Centre and identified 108 PLWH who started B/F/TAF at their first clinical visit from May 2019 until December 2022 and were followed up until March 2024. B/F/TAF was initiated in all subjects within 24 hours. We present our efficacy results on the whole population (intent-to-treat, ITT) and on those evaluated (on-treatment, OT). Recent infection by the presence of symptom of acute infection, evolution of antibodies and/or negative HIV test in the previous 6-months.

RESULTS: 108 PLWH were included; the mean age was 38.6 years, and 103 (95.4%) were males. The mean CD4 count was 340.7 cells/ μ L (26.9% had a CD4 count <200 cells/ μ L), clinical AIDS was present in 8 (7.4%), and the mean HIV-1 RNA was 4.9 log10 copies/mL (43.5% had >100,000 copies/mL). Recent infection was diagnosed in 32 (29.6%), 4 (3.9%) were HBsAg positive, and 1 had anti-HCV antibodies (Table).

At 6 months (range 4 to 8), the efficacy (HIV-1 RNA <50 copies/mL) on ITT was 83.3%. The OT population included 98 PLWH, 90 (91.8%) had <50 copies/mL, and 8 (8.2%) had between 50 and 200 copies/mL. Of the 10 PLWH who did not have HIV-1 RNA measurements, 5 subsequently had an undetectable viral load (VL), 3 were lost to follow-up, 1 moved, and 1 died. At 12 months (range 9 to 15), the efficacy (HIV-1 RNA <50 copies/mL) on ITT was 78.7%. The OT efficacy (HIV-1 RNA <50 copies/mL) was 91.4% (85/93), and 8 (8.6%) had between 50 and 200 copies/mL. Of the 15 PLWH who did not have VL measurements, 9 subsequently had an undetectable VL, 3 were lost to follow-up, 2 moved, and 1 died (Figure).





100-91.4 ITT 78.7 OT 50 13.9 8.6 7.4 HIV-1 RNA HIV-1 RNA No measurment < 50 c/ml 50 to 200 c/ml ITT: 85/108 8/108 15/108 OT: 90/93 8/93

Virologic outcome at 12 (9 to 15) months

Table. Main baseline characteristics of 108 persons

CHARACTERISTICS	Frequency (%) or median (Q1-Q3)
Age, years	38.4 (28.6-46.5)
Male gender	103 (95.4)
CD4 cell count per µL	340.5 (185.5-470.5)
CD4 cell count < 200 per µL	29 (26.9)
HIV-1 RNA, log10 copies/ml	4.8 (4.4-5.6)
HIV-1 RNA, > 100 000 copies/ml	47 (43.5)
Recent HIV infection	32 (29.6)
Time from HIV diagnosis*, days	7.0 (3.0-12.5)
HBV infection (HBsAg+)	4 (3.9)
Antibody to HCV	1 (1.0)

B/F/TAF was an efficiency antique for treatment.

CONCLUSION: In our real-life setting, same-day

treatment with B/F/TAF was virologically

B/F/TAF was an efficacious option for treatmentnaïve PLWH in a same-day start ART model.

References:

^{*}Time from first positive HIV test

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