

Supplementary Material

Antiretroviral Therapy Switching Among People with HIV in the United States is not Uncommon Despite Virologic Suppression: An OPERA Cohort Study

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Table S1. Top 10 most common regimens before suppressed_{<200} switches (N = 8,564 switches)

	Regimen	n (%)
1	bictegravir/emtricitabine/tenofovir alafenamide	2,457 (29%)
2	dolutegravir/abacavir/lamivudine	981 (11%)
3	dolutegravir/lamivudine	889 (10%)
4	cabotegravir + rilpivirine	789 (9%)
5	elvitegravir/cobicistat/emtricitabine/tenofovir alafenamide	616 (7%)
6	darunavir/cobicistat/emtricitabine/tenofovir alafenamide	509 (6%)
7	dolutegravir + emtricitabine/tenofovir alafenamide	300 (4%)
8	rilpivirine/emtricitabine/tenofovir alafenamide	272 (3%)
9	dolutegravir/rilpivirine	139 (2%)
10	darunavir/cobicistat/emtricitabine/tenofovir alafenamide + dolutegravir	107 (1%)

Table S2. Top 10 most common regimens before suppressed_{<50} switches (N = 7,606 switches)

	Regimen	n (%)
1	bictegravir/emtricitabine/tenofovir alafenamide	2,201 (29%)
2	dolutegravir/abacavir/lamivudine	906 (12%)
3	dolutegravir/lamivudine	800 (11%)
4	cabotegravir + rilpivirine	732 (10%)
5	elvitegravir/cobicistat/emtricitabine/tenofovir alafenamide	559 (7%)
6	darunavir/cobicistat/emtricitabine/tenofovir alafenamide	419 (6%)
7	dolutegravir + emtricitabine/tenofovir alafenamide	269 (4%)
8	rilpivirine/emtricitabine/tenofovir alafenamide	251 (3%)
9	dolutegravir/rilpivirine	126 (2%)
10	darunavir/cobicistat/emtricitabine/tenofovir alafenamide + dolutegravir	86 (1%)

Table S3. Top 10 most common regimens after suppressed_{<200} switches (N = 8,564)

	Regimen	n (%)
1	cabotegravir + rilpivirine	2,215 (26%)
2	bictegravir/emtricitabine/tenofovir alafenamide	2,103 (25%)
3	dolutegravir/lamivudine	2,028 (24%)
4	darunavir/cobicistat/emtricitabine/tenofovir alafenamide	236 (3%)
5	dolutegravir/rilpivirine	227 (3%)
6	dolutegravir/abacavir/lamivudine	142 (2%)
7	dolutegravir + emtricitabine/tenofovir alafenamide	121 (1%)
8	elvitegravir/cobicistat/emtricitabine/tenofovir alafenamide	120 (1%)
9	rilpivirine/emtricitabine/tenofovir alafenamide	98 (1%)
10	darunavir/cobicistat + dolutegravir	57 (1%)

Table S4. Top 10 most common regimens after suppressed_{<50} switches (N = 7,606 switches)

	Regimen	n (%)
1	cabotegravir + rilpivirine	2,043 (27%)
2	bictegravir/emtricitabine/tenofovir alafenamide	1,863 (24%)
3	dolutegravir/lamivudine	1,858 (24%)
4	dolutegravir/rilpivirine	198 (3%)
5	darunavir/cobicistat/emtricitabine/tenofovir alafenamide	192 (3%)
6	dolutegravir/abacavir/lamivudine	129 (2%)
7	dolutegravir + emtricitabine/tenofovir alafenamide	109 (1%)
8	elvitegravir/cobicistat/emtricitabine/tenofovir alafenamide	106 (1%)
9	rilpivirine/emtricitabine/tenofovir alafenamide	90 (1%)
10	darunavir/cobicistat + dolutegravir	48 (1%)

Table S5. Frequency and rate of ART regimen switch between 01JUL2024 and 30JUN2025, among individuals who were virologically suppressed to <200 copies/mL and <50 copies/mL for the entire study period

	Individuals on ART N = 73,078
Virologically suppressed to <200 copies/mL throughout study period, n (%)	46,199 (63)
Experienced a switch, n (%)	4,822 (10)
Total # switches, N	6,103
Experienced >1 switch, n (%)	857 (18)
Mean # switches per person, mean (SD)	1.3 (0.7)
Incidence rate, number of switches per 100 person-years on ART while virologically suppressed to <200 copies/mL (95% CI)	13.3 (13.0, 13.6)
Virologically suppressed to <50 copies/mL throughout study period, n (%)	37,348 (51)
Experienced a switch, n (%)	3,770 (10)
Total # switches, N	4,736
Experienced >1 switch, n (%)	658 (17)
Mean # switches per person, mean (SD)	1.3 (0.7)
Incidence rate, number of switches per 100 person-years on ART while virologically suppressed to <50 copies/mL (95% CI)	12.8 (12.4, 13.1)

ART, antiretroviral therapy; CI, confidence interval; n, number; SD, standard deviation

Table S6. Frequency and rate of alternate definition of anchor agent switch^a between 01JUL2024 and 30JUN2025, overall and while virologically suppressed

	Individuals on ART N = 73,078
Experienced an anchor agent switch, n (%)	7,349 (10)
Total # anchor agent switches, N	9,208
Experienced >1 anchor agent switch, n (%)	1,295 (18)
Mean # anchor agent switches per person, mean (SD)	1.3 (0.7)
Incidence rate, number of anchor agent switches per 100 person-years on ART (95% CI)	13.7 (13.4, 13.9)
Virologically suppressed to <200 copies/mL during study period, n (%)	68,147 (93)
Experienced a suppressed _{<200} anchor agent switch, n (%)	6,139 (9)
Total # suppressed _{<200} anchor agent switches, N	7,571
Experienced >1 suppressed _{<200} anchor agent switch, n (%)	1,025 (17%)
Mean # suppressed _{<200} anchor agent switches per person, mean (SD)	1.2 (0.6)
Incidence rate, number of suppressed _{<200} anchor agent switches per 100 person-years on ART while virologically suppressed to <200 copies/mL (95% CI)	12.8 (12.5, 13.1)
Virologically suppressed to <50 copies/mL during study period, n (%)	65,475 (90)
Experienced a suppressed _{<50} anchor agent switch, n (%)	5,486 (8)
Total # suppressed _{<50} anchor agent switches, N	5,486
Experienced >1 suppressed _{<50} anchor agent switch, n (%)	889 (16)
Mean # suppressed _{<50} anchor agent switches per person, mean (SD)	1.2 (0.6)
Incidence rate, number of suppressed _{<50} anchor agent switches per 100 person-years on ART while virologically suppressed to <50 copies/mL (95% CI)	12.4 (12.1, 12.7)

ART, antiretroviral therapy; CI, confidence interval; n, number; SD, standard deviation

^a Anchor agent switch was defined as the addition of or discontinuation of any anchor ARV agent from the current ART regimen