Supplemental Digital Content 1

Table: Summary of cohort demographics

Sample (n, %) 307 (81.2) 71 (18.8) 378 (100.0) Age (years) 49 (43-55) 46 (41-53) 49 (43-55) ART initiation to INSTI (years) 1.26 (0.76-1.64) 1.28 (0.72-1.64) 1.26 (0.76-1.68) Weight at switch (kg) † 77.0 (70.6-84.6) 73.4 (66.6-84.2) 76.6 (70.1-84.4) (n-304) (n=68) (n=372) BMI at switch (kg/m²) 25.0 (22.8-27.2) 28.0 (24.9-32.4) 25.3 (23.1-27.7) (n=203) (n=44]) (n=247) CD4+ T-cell count (cells/μL) ‡ 610 (490-760) 755 (575-875) 640 (500-790) [n (%), n=307] [n (%), n=71] [n (%), n=378] Ethnicity White 251 (81.8) 14 (19.7) 265 (70.1) Black African 20 (6.5) 47 (66.2) 67 (17.7) (7.77)		Men	Women*	Overall	
Age (years) ART initiation to INSTI (years) Time on INSTI (years) Weight at switch (kg) † 1.26 (0.76-1.64) 1.28 (0.72-1.64) 1.28 (0.72-1.64) 1.26 (0.76-1.68) Time on INSTI (years) Weight at switch (kg/m²) BMI at switch (kg/m²) CD4+ T-cell count (cells/µL) ‡ 610 (490-760) [n (%), n=307] Ethnicity White Black African Other non-white Non-PI Non-PI Non-PI TDF+FTC+DTG ABC+3TC+PTG ABC+3TC+DTG Variable backbone Comorbidities ¶ T2DM Hypertension NAFLD Hypertension NAFLD Hypertension Perperssion Hypothyroidism ABC+3TC+DTG Real BAC+3TC+DTG ASA Perperssion Hypothyroidism ABC+3TC+DTG ASA Perperssion Per	Sample (n, %)	307 (81.2)	71 (18.8)	378 (100.0)	
ART initiation to INSTI (years) Time on INSTI (years) Weight at switch (kg) † 77.0 (70.6–84.6) Time on INSTI (years) Weight at switch (kg/m²) BMI at switch (kg/m²) CD4+ T-cell count (cells/µL) ‡ Black African Other non-white DTG DTG Non-PI Non-PI Non-PI Non-PI NATI backbone § TDF+FTC+RAL TDF+FTC+DTG ABC+3TC+RAL ABC+3TC+DTG Variable backbone Comorbidities ¶ T2DM Hypertension NAFLD Hypertension NAFLD Hypertension Perssion Hypothyroidism Perssion Ps. 5.6 (2-2.13.7) Ps. 6 (6.6-14.7) Ps. 6 (6.6-84.2) Press (6.6-9.75 (6.7) Ps. 5 (5.6-875) Ps. 6 (6.05 (6.2) Ps. 6 (6.5) Ps		[median (IQR)]	[median (IQR)]	[median (IQR)]	
Time on INSTI (years) Weight at switch (kg) † 1.26 (0.76-1.64) T7.0 (70.6-84.6) T0.0 (10.6-84.2) T0.0 (10.6-84.6) T0.0 (10.6-84.4) T0.0 (10.6-84.6) T0.0 (10.6-84.6) T0.0 (10.6-84.6) T0.0 (10.6-8-1) T0.0 (10.6-	Age (years)	49 (43–55)	46 (41–53)	49 (43-55)	
Weight at switch (kg) † 77.0 (70.6–84.6) (n=304) 73.4 (66.6–84.2) (n=372) 76.6 (70.1–84.4) (n=372) BMI at switch (kg/m²) 25.0 (22.8–27.2) (28.0 (24.9–32.4) (25.3 (23.1–27.7) (n=203) (n=44]) (n=247) 25.0 (22.8–27.2) (28.0 (24.9–32.4) (25.3 (23.1–27.7) (n=203) (n=44]) (n=247) CD4+ T-cell count (cells/µL) ‡ 610 (490–760) 755 (575–875) (640 (500–790)) [n (%), n=378] Ethnicity White Black African 20 (6.5) 47 (66.2) (67 (17.7) (10.4.1) (1	ART initiation to INSTI (years)	8.6 (5.2-13.7)	11.6 (8.6-14.7)	9.5 (5.8-14.1)	
(n=304)	Time on INSTI (years)	1.26 (0.76-1.64)	1.28 (0.72-1.64)	1.26 (0.76-1.68)	
BMI at switch (kg/m²)	Weight at switch (kg) †	77.0 (70.6–84.6)	73.4 (66.6-84.2)	76.6 (70.1–84.4)	
(n=203) (n=44]) (n=247) CD4+ T-cell count (cells/μL) ‡ 610 (490–760) 755 (575–875) 640 (500–790) In (%), n=307] [n (%), n=71] [n (%), n=378] Ethnicity 251 (81.8) 14 (19.7) 265 (70.1) Black African Other non-white 20 (6.5) 47 (66.2) 67 (17.7) Other non-white 36 (11.7) 10 (14.1) 46 (12.2) INSTI RAL 207 (67.4) 41 (57.8) 248 (65.6) DTG 100 (32.6) 30 (42.3) 130 (34.4) Pre-switch PI 152 (49.5) 41 (57.8) 193 (51.1) Non-PI 155 (50.5) 30 (42.3) 185 (48.9) NRTI backbone § TDF+FTC+RAL 126 (41.0) 21 (29.6) 147 (38.9) TDF+FTC+DTG 38 (12.4) 3 (4.2) 41 (10.8) ABC+3TC+RAL 30 (9.8) 15 (21.1) 45 (11.9) ABC+3TC+DTG 26 (8.5) 8 (11.3) 34 (9.0) Variable backbone 87 (28.3) 24 (33.8) 111 (29.4) Comorbidities ¶ 13 (4.2) 6 (8.5) 19 (5.0) Hypertension 35		(<i>n</i> =304)	(<i>n</i> =68)	(<i>n</i> =372)	
CD4+ T-cell count (cells/µL) ‡ 610 (490–760) 755 (575–875) 640 (500–790) [n (%), n=307] [n (%), n=71] [n (%), n=378] [n (%), n=378 [n (%), n=378] [BMI at switch (kg/m²)	25.0 (22.8–27.2)	28.0 (24.9-32.4)	25.3 (23.1-27.7)	
Ethnicity White		(<i>n</i> =203)	(<i>n</i> =44])	(<i>n</i> =247)	
Ethnicity White Black African Other non-white Black African Black African Other non-white Black African Black Black Blass (48.5) Blass (48	CD4+ T-cell count (cells/µL) ‡	610 (490–760)	755 (575–875)	640 (500-790)	
White 251 (81.8) 14 (19.7) 265 (70.1) Black African 20 (6.5) 47 (66.2) 67 (17.7) Other non-white 36 (11.7) 10 (14.1) 46 (12.2) INSTI RAL 207 (67.4) 41 (57.8) 248 (65.6) DTG 100 (32.6) 30 (42.3) 130 (34.4) Pre-switch PI 152 (49.5) 41 (57.8) 193 (51.1) Non-PI 155 (50.5) 30 (42.3) 185 (48.9) NRTI backbone § TDF+FTC+RAL 126 (41.0) 21 (29.6) 147 (38.9) TDF+FTC+DTG 38 (12.4) 3 (4.2) 41 (10.8) ABC+3TC+DTG 26 (8.5) 8 (11.3) 34 (9.0) Variable backbone 87 (28.3) 24 (33.8) 111 (29.4) Comorbidities ¶ T2DM 13 (4.2) 6 (8.5) 19 (5.0) Hypertension 35 (11.1) 17 (23.9) 52 (13.8) NAFLD 27 (8.8) 3 (4.2) 30 (7.9) High 49 (16.0) 8 (11.3) 57 (15.1) IHD/CVD		[n (%), n=307]	[<i>n</i> (%), <i>n</i> =71]	[n (%), n=378]	
Black African Other non-white 36 (11.7) 10 (14.1) 46 (12.2) INSTI RAL DTG DTG 100 (32.6) 30 (42.3) 130 (34.4) Pre-switch PI 152 (49.5) NRTI backbone § TDF+FTC+RAL 126 (41.0) TDF+FTC+DTG ABC+3TC+RAL 30 (9.8) 15 (21.1) ABC+3TC+DTG Variable backbone R7 (28.3) 24 (33.8) 111 (29.4) Comorbidities ¶ T2DM T2DM T2DM T2DM T2DM T3 (4.2) Hypertension T35 (11.1) T20D NRTLD T20D NRTLD T20D NRTLD T20D NRTLD T20D T20D T20D T20D T20D T20D T20D T20	Ethnicity				
Other non-white 36 (11.7) 10 (14.1) 46 (12.2) INSTI RAL 207 (67.4) 41 (57.8) 248 (65.6) DTG 100 (32.6) 30 (42.3) 130 (34.4) Pre-switch PI 152 (49.5) 41 (57.8) 193 (51.1) Non-PI 155 (50.5) 30 (42.3) 185 (48.9) NRTI backbone § TDF+FTC+RAL 126 (41.0) 21 (29.6) 147 (38.9) TDF+FTC+DTG 38 (12.4) 3 (4.2) 41 (10.8) ABC+3TC+RAL 30 (9.8) 15 (21.1) 45 (11.9) ABC+3TC+DTG 26 (8.5) 8 (11.3) 34 (9.0) Variable backbone 87 (28.3) 24 (33.8) 111 (29.4) Comorbidities ¶ T2DM 13 (4.2) 6 (8.5) 19 (5.0) Hypertension 35 (11.1) 17 (23.9) 52 (13.8) NAFLD 27 (8.8) 3 (4.2) 30 (7.9) High 49 (16.0) 8 (11.3) 57 (15.1) IHD/CVD 20 (6.5) 6 (8.5) 26 (6.9) <	White	251 (81.8)	14 (19.7)	265 (70.1)	
RAL	Black African	20 (6.5)	47 (66.2)	67 (17.7)	
RAL DTG 100 (32.6) 30 (42.3) 130 (34.4) Pre-switch PI 152 (49.5) 41 (57.8) 193 (51.1) 155 (50.5) 30 (42.3) 185 (48.9) NRTI backbone § TDF+FTC+RAL 126 (41.0) 21 (29.6) 147 (38.9) 15 (21.1) 45 (11.9) 45 (1	Other non-white	36 (11.7)	10 (14.1)	46 (12.2)	
DTG 100 (32.6) 30 (42.3) 130 (34.4) Pre-switch PI 152 (49.5) 41 (57.8) 193 (51.1) Non-PI 155 (50.5) 30 (42.3) 185 (48.9) NRTI backbone § TDF+FTC+RAL 126 (41.0) 21 (29.6) 147 (38.9) TDF+FTC+DTG 38 (12.4) 3 (4.2) 41 (10.8) ABC+3TC+RAL 30 (9.8) 15 (21.1) 45 (11.9) ABC+3TC+DTG 26 (8.5) 8 (11.3) 34 (9.0) Variable backbone 87 (28.3) 24 (33.8) 111 (29.4) Comorbidities ¶ T2DM 13 (4.2) 6 (8.5) 19 (5.0) Hypertension 35 (11.1) 17 (23.9) 52 (13.8) NAFLD 27 (8.8) 3 (4.2) 30 (7.9) High 49 (16.0) 8 (11.3) 57 (15.1) IHD/CVD 20 (6.5) 6 (8.5) 26 (6.9) Renal impairment # 31 (10.1) 6 (8.5) 37 (9.8) Insomnia 6 (2.0) 3 (4.2) 9 (2.4) Depression 92 (30.0)	INSTI				
Pre-switch PI Non-PI Non-PI 152 (49.5) 155 (50.5) 30 (42.3) 185 (48.9) NRTI backbone § TDF+FTC+RAL 126 (41.0) 21 (29.6) 147 (38.9) TDF+FTC+DTG 38 (12.4) 3 (4.2) 41 (10.8) ABC+3TC+RAL 30 (9.8) 15 (21.1) 45 (11.9) ABC+3TC+DTG 26 (8.5) 8 (11.3) 34 (9.0) Variable backbone 87 (28.3) 24 (33.8) 111 (29.4) Comorbidities ¶ T2DM 13 (4.2) 6 (8.5) 19 (5.0) Hypertension 35 (11.1) 17 (23.9) 52 (13.8) NAFLD 27 (8.8) 3 (4.2) 30 (7.9) High 49 (16.0) 8 (11.3) 57 (15.1) IHD/CVD 20 (6.5) 6 (8.5) 26 (6.9) Renal impairment # 31 (10.1) 6 (8.5) 37 (9.8) Insomnia 6 (2.0) 3 (4.2) 9 (2.4) Depression 92 (30.0) 21 (29.6) 113 (29.9) Hypothyroidism 6 (2.0) 4 (5.6) 10 (2.7) OSA 1 (0.3)	RAL	207 (67.4)	41 (57.8)	248 (65.6)	
PI Non-PI 155 (49.5) 41 (57.8) 193 (51.1) Non-PI 155 (50.5) 30 (42.3) 185 (48.9) NRTI backbone § TDF+FTC+RAL 126 (41.0) 21 (29.6) 147 (38.9) TDF+FTC+DTG 38 (12.4) 3 (4.2) 41 (10.8) ABC+3TC+DTG 26 (8.5) 8 (11.3) 34 (9.0) Variable backbone 87 (28.3) 24 (33.8) 111 (29.4) Comorbidities ¶ T2DM 13 (4.2) 6 (8.5) 19 (5.0) Hypertension 35 (11.1) 17 (23.9) 52 (13.8) NAFLD 27 (8.8) 3 (4.2) 30 (7.9) High 49 (16.0) 8 (11.3) 57 (15.1) IHD/CVD 20 (6.5) 6 (8.5) 26 (6.9) Renal impairment # 31 (10.1) 6 (8.5) 37 (9.8) Insomnia 6 (2.0) 3 (4.2) 9 (2.4) Depression 92 (30.0) 21 (29.6) 113 (29.9) Hypothyroidism 6 (2.0) 4 (5.6) 10 (2.7) OSA	DTG	100 (32.6)	30 (42.3)	130 (34.4)	
Non-PI 155 (50.5) 30 (42.3) 185 (48.9) NRTI backbone § TDF+FTC+RAL 126 (41.0) 21 (29.6) 147 (38.9) TDF+FTC+DTG 38 (12.4) 3 (4.2) 41 (10.8) ABC+3TC+RAL 30 (9.8) 15 (21.1) 45 (11.9) ABC+3TC+DTG 26 (8.5) 8 (11.3) 34 (9.0) Variable backbone 87 (28.3) 24 (33.8) 111 (29.4) Comorbidities ¶ 13 (4.2) 6 (8.5) 19 (5.0) Hypertension 35 (11.1) 17 (23.9) 52 (13.8) NAFLD 27 (8.8) 3 (4.2) 30 (7.9) High 49 (16.0) 8 (11.3) 57 (15.1) IHD/CVD 20 (6.5) 6 (8.5) 26 (6.9) Renal impairment # 31 (10.1) 6 (8.5) 37 (9.8) Insomnia 6 (2.0) 3 (4.2) 9 (2.4) Depression 92 (30.0) 21 (29.6) 113 (29.9) Hypothyroidism 6 (2.0) 4 (5.6) 10 (2.7) OSA 1 (0.3) 0 1 (0.3)	Pre-switch				
NRTI backbone § TDF+FTC+RAL TDF+FTC+DTG TDF-FTC+RAL TDF-FTC-FTC-FTC-FTC-FTC-FTC-FTC-FTC-FTC-FT	PI	152 (49.5)	41 (57.8)	193 (51.1)	
TDF+FTC+RAL 126 (41.0) 21 (29.6) 147 (38.9) TDF+FTC+DTG 38 (12.4) 3 (4.2) 41 (10.8) ABC+3TC+RAL 30 (9.8) 15 (21.1) 45 (11.9) ABC+3TC+DTG 26 (8.5) 8 (11.3) 34 (9.0) Variable backbone 87 (28.3) 24 (33.8) 111 (29.4) Comorbidities ¶ T2DM 13 (4.2) 6 (8.5) 19 (5.0) Hypertension 35 (11.1) 17 (23.9) 52 (13.8) NAFLD 27 (8.8) 3 (4.2) 30 (7.9) High 49 (16.0) 8 (11.3) 57 (15.1) IHD/CVD 20 (6.5) 6 (8.5) 26 (6.9) Renal impairment # 31 (10.1) 6 (8.5) 37 (9.8) Insomnia 6 (2.0) 3 (4.2) 9 (2.4) Depression 92 (30.0) 21 (29.6) 113 (29.9) Hypothyroidism 6 (2.0) 4 (5.6) 10 (2.7) OSA 1 (0.3) 0 1 (0.3)	Non-PI	155 (50.5)	30 (42.3)	185 (48.9)	
TDF+FTC+DTG	NRTI backbone §				
ABC+3TC+RAL ABC+3TC+DTG ABC+3TC+DTG Variable backbone R7 (28.3) Comorbidities ¶ T2DM Hypertension NAFLD High High HD/CVD Renal impairment # Insomnia B(2.0) B(3.0) B(3.	TDF+FTC+RAL	126 (41.0)	21 (29.6)	147 (38.9)	
ABC+3TC+DTG Variable backbone 87 (28.3) 24 (33.8) 34 (9.0) Variable backbone 87 (28.3) 24 (33.8) 111 (29.4) Comorbidities ¶ T2DM 13 (4.2) 6 (8.5) 19 (5.0	TDF+FTC+DTG	38 (12.4)	3 (4.2)	41 (10.8)	
Variable backbone 87 (28.3) 24 (33.8) 111 (29.4) Comorbidities ¶ T2DM 13 (4.2) 6 (8.5) 19 (5.0) Hypertension 35 (11.1) 17 (23.9) 52 (13.8) NAFLD 27 (8.8) 3 (4.2) 30 (7.9) High 49 (16.0) 8 (11.3) 57 (15.1) IHD/CVD 20 (6.5) 6 (8.5) 26 (6.9) Renal impairment # 31 (10.1) 6 (8.5) 37 (9.8) Insomnia 6 (2.0) 3 (4.2) 9 (2.4) Depression 92 (30.0) 21 (29.6) 113 (29.9) Hypothyroidism 6 (2.0) 4 (5.6) 10 (2.7) OSA 1 (0.3) 0 1 (0.3)	ABC+3TC+RAL	30 (9.8)	15 (21.1)	45 (11.9)	
Comorbidities ¶ T2DM 13 (4.2) 6 (8.5) 19 (5.0) Hypertension 35 (11.1) 17 (23.9) 52 (13.8) NAFLD 27 (8.8) 3 (4.2) 30 (7.9) High 49 (16.0) 8 (11.3) 57 (15.1) IHD/CVD 20 (6.5) 6 (8.5) 26 (6.9) Renal impairment # 31 (10.1) 6 (8.5) 37 (9.8) Insomnia 6 (2.0) 3 (4.2) 9 (2.4) Depression 92 (30.0) 21 (29.6) 113 (29.9) Hypothyroidism 6 (2.0) 4 (5.6) 10 (2.7) OSA 1 (0.3) 0 1 (0.3)	ABC+3TC+DTG	26 (8.5)	8 (11.3)	34 (9.0)	
T2DM 13 (4.2) 6 (8.5) 19 (5.0) Hypertension 35 (11.1) 17 (23.9) 52 (13.8) NAFLD 27 (8.8) 3 (4.2) 30 (7.9) High 49 (16.0) 8 (11.3) 57 (15.1) IHD/CVD 20 (6.5) 6 (8.5) 26 (6.9) Renal impairment # 31 (10.1) 6 (8.5) 37 (9.8) Insomnia 6 (2.0) 3 (4.2) 9 (2.4) Depression 92 (30.0) 21 (29.6) 113 (29.9) Hypothyroidism 6 (2.0) 4 (5.6) 10 (2.7) OSA 1 (0.3) 0 1 (0.3)	Variable backbone	87 (28.3)	24 (33.8)	111 (29.4)	
Hypertension 35 (11.1) 17 (23.9) 52 (13.8) NAFLD 27 (8.8) 3 (4.2) 30 (7.9) High 49 (16.0) 8 (11.3) 57 (15.1) IHD/CVD 20 (6.5) 6 (8.5) 26 (6.9) Renal impairment # 31 (10.1) 6 (8.5) 37 (9.8) Insomnia 6 (2.0) 3 (4.2) 9 (2.4) Depression 92 (30.0) 21 (29.6) 113 (29.9) Hypothyroidism 6 (2.0) 4 (5.6) 10 (2.7) OSA 1 (0.3) 0 1 (0.3)	Comorbidities ¶				
NAFLD 27 (8.8) 3 (4.2) 30 (7.9) High 49 (16.0) 8 (11.3) 57 (15.1) IHD/CVD 20 (6.5) 6 (8.5) 26 (6.9) Renal impairment # 31 (10.1) 6 (8.5) 37 (9.8) Insomnia 6 (2.0) 3 (4.2) 9 (2.4) Depression 92 (30.0) 21 (29.6) 113 (29.9) Hypothyroidism 6 (2.0) 4 (5.6) 10 (2.7) OSA 1 (0.3) 0 1 (0.3)	T2DM	13 (4.2)	6 (8.5)	19 (5.0)	
High 49 (16.0) 8 (11.3) 57 (15.1) IHD/CVD 20 (6.5) 6 (8.5) 26 (6.9) Renal impairment # 31 (10.1) 6 (8.5) 37 (9.8) Insomnia 6 (2.0) 3 (4.2) 9 (2.4) Depression 92 (30.0) 21 (29.6) 113 (29.9) Hypothyroidism 6 (2.0) 4 (5.6) 10 (2.7) OSA 1 (0.3) 0 1 (0.3)	Hypertension	35 (11.1)	17 (23.9)	52 (13.8)	
IHD/CVD 20 (6.5) 6 (8.5) 26 (6.9) Renal impairment # 31 (10.1) 6 (8.5) 37 (9.8) Insomnia 6 (2.0) 3 (4.2) 9 (2.4) Depression 92 (30.0) 21 (29.6) 113 (29.9) Hypothyroidism 6 (2.0) 4 (5.6) 10 (2.7) OSA 1 (0.3) 0 1 (0.3)	NAFLD	27 (8.8)	3 (4.2)	30 (7.9)	
Renal impairment # Insomnia 31 (10.1) 6 (8.5) 37 (9.8) Insomnia 6 (2.0) 3 (4.2) 9 (2.4) Depression 92 (30.0) 21 (29.6) 113 (29.9) Hypothyroidism 6 (2.0) 4 (5.6) 10 (2.7) OSA 1 (0.3) 0 1 (0.3)	High	49 (16.0)	8 (11.3)		
Insomnia 6 (2.0) 3 (4.2) 9 (2.4) Depression 92 (30.0) 21 (29.6) 113 (29.9) Hypothyroidism 6 (2.0) 4 (5.6) 10 (2.7) OSA 1 (0.3) 0 1 (0.3)	IHD/CVD	20 (6.5)	6 (8.5)		
Depression 92 (30.0) 21 (29.6) 113 (29.9) Hypothyroidism 6 (2.0) 4 (5.6) 10 (2.7) OSA 1 (0.3) 0 1 (0.3)	Renal impairment #	31 (10.1)	6 (8.5)	37 (9.8)	
Hypothyroidism 6 (2.0) 4 (5.6) 10 (2.7) OSA 1 (0.3) 0 1 (0.3)	Insomnia	6 (2.0)	3 (4.2)	9 (2.4)	
OSA 1 (0.3) 0 1 (0.3)	Depression	92 (30.0)	21 (29.6)	113 (29.9)	
	Hypothyroidism	6 (2.0)	4 (5.6)	10 (2.7)	
Menopause — 8 (11.3) 8 (2.1)	OSA	1 (0.3)	0	1 (0.3)	
	Menopause	_	8 (11.3)	8 (2.1)	

*Includes one male-to-female transgender, no women were pregnant within two years pre- and post-switch. †Last recorded prior to switch. ‡Last recorded ≤1 year prior to switch. § Individuals had to maintain the same NRTI backbone pre- and post-switch. ¶ Comorbidity data was collected from reported medical history in patient clinical records. # Includes chronic kidney disease of any cause and proximal renal tubulopathy.

ABC = abacavir, ART= Antiretroviral therapy, BMI=body mass index, CVD=cerebrovascular disease, DTG=dolutegravir, FTC = emtricitabine, IQR=interquartile range, IHD=ischaemic heart disease, INSTI = Integrase strand transfer inhibitor, NAFLD=non-alcoholic fatty liver disease, NRTI = nucleoside reverse transcriptase inhibitor, OSA=obstructive sleep apnoea, PI=Protease Inhibitor, RAL=raltegravir, TDF = tenofovir disoproxil fumarate, T2DM=type 2 diabetes mellitus, 3TC = lamivudine

Supplementary Digital Content 2

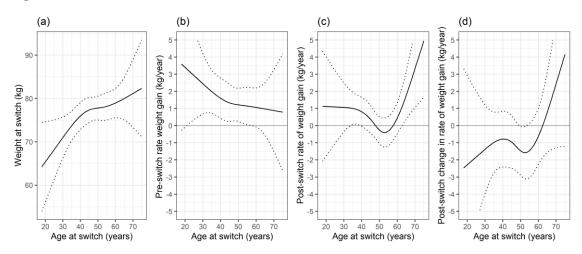
Text/Figure/Table: Model of change in rate of weight gain when adjusting for TDF+FTC or ABC+3TC

ABC=abacavir, FTC=emtricitabine, TDF=tenofovir disoproxil fumarate, 3TC=lamivudine

Text

Supplementary Digital Content 2, Figure 1 shows the change in rate of weight gain for individuals who remained on either tenofovir disoproxil fumarate + emtricitabine (TDF+FTC) or abacavir + lamivudine (ABC+3TC) [n=267/378, 71%]. The trajectories of rate of weight gain preand post-switch are similar to those in figure 1b-d of the main text. Overall, there was no significant change in the rate of weight gain following switch. When looking for any associations with cohort characteristics (see Supplementary Digital Content 2, Table 1 below), only other non-white ethnicity reached significance for post-switch change in rate of weight gain [p=0.01, 3.11 (0.79 to 5.43)]. However, this subgroup is small (n=39) and should be interpreted with caution.

Figure



Supplementary Digital Content 2, Figure 1 Estimates of average (a) weight at switch to INSTI regimen, (b) pre-switch rate of weight gain (c) post-switch rate of weight gain and (d) post-switch change in rate of weight gain in relation to age at switch among those people on a consistent NRTI backbone made up of TDF+FTC or ABC+3TC. These estimates are derived from models with adjustment for the demographic and treatment characteristics listed in Supplementary Digital Content 2, Table 1 (see below). The plots relate to a white male individual switching from a non-PI to a RAL-based regimen with consistent TDF+FTC NRTI backbone. Dotted lines show pointwise 95% CI. Plot (c) represents a summation of the functions in (b) and (d). ABC=abacavir, CI=confidence interval, FTC=emtricitabine, INSTI=Integrase strand transfer inhibitor, NRTI=nucleoside reverse transcriptase inhibitor, PI=Protease Inhibitor, RAL=raltegravir, TDF=tenofovir disoproxil fumarate, 3TC=lamivudine

Table

Supplementary Digital Content 2, Table 1 Associations between demographic/treatment characteristics and weight trajectories only amongst those people on a consistent TDF+FTC or ABC+3TC NRTI backbone.

		n (%)	Weight at switch		Pre-switch rate of weight gain (per year)		Post-switch change in rate of weight gain (per year)	
			ΔEst. (95%CI)	<i>P</i> -value	ΔEst. (95%CI)	<i>P</i> -value	ΔEst. (95%CI)	P-value
Weight results (kg)								
Gender	Men	217 (83.1)	0 [Reference]		0 [Reference]		0 [Reference]	
	Women	44 (16.9)	-6.16 (-10.89 to -1.43)	<0.01	-0.87 (-2.49 to 0.76)	0.30	0.47 (-1.91 to 2.85)	0.70
Ethnicity	White	179 (68.6)	0 [Reference]		0 [Reference]		0 [Reference]	
	Black African	43 (16.5)	7.08 (2.23 to 11.93)	<0.01	-0.11 (-1.72 to 1.5)	0.90	0.61 (-1.74 to 2.96)	0.61
	Other non-white	39 (14.9)	3.11 (-1.37 to 7.58)	0.17	-1.65 (-3.25 to -0.06)	0.04	3.11 (0.79 to 5.43)	0.01
Pre-switch	Non-PI	143 (54.8)	0 [Reference]		0 [Reference]		0 [Reference]	
	PI	118 (45.2)	1.80 (-1.39 to 5.00)	0.27	-0.73 (-1.86 to 0.4)	0.21	1.18 (-0.42 to 2.78)	0.15
Post-switch	RAL	188 (72.0)	0 [Reference]		0 [Reference]		0 [Reference]	
NRTI backbone	DTG TDF+FTC	73 (28.0) 184 (70.5)	-1.00 (-4.60 to 2.60) 0 [Reference]	0.59	0.02 (-1.27 to 1.3) 0 [Reference]	0.98	-0.35 (-2.14 to 1.45) 0 [Reference]	0.71
	ABC+3TC	77 (29.5)	0.92 (-2.52 to 4.36)	0.60	0.33 (-0.86 to 1.51)	0.59	-0.87 (-2.54 to 0.81)	0.31

Associations between demographic/treatment characteristics and both average weight and BMI trajectories during the two years before and after switch to a RAL or DTG-based INSTI regimen. Adjusted for age at switch and the other variables listed in the table. Estimates are expressed relative (Δ) to the average value at any given age (Figure 1). ABC= abacavir, BMI=Body Mass Index, CI=Confidence Interval, DTG=dolutegravir, FTC=emtricitabine, NRTI=nucleoside reverse transcriptase inhibitor, PI=Protease Inhibitor, RAL=raltegravir, TDF=tenofovir disoproxil fumarate, 3TC=lamivudine.