**Supplemantary Materials**

**Supplemantary Table 1.** Multivariable analysis of factors associated with detectable HBV DNA (≥20 IU/mL) by generalized estimating equation (GEE)

|  |  |  |  |
| --- | --- | --- | --- |
| Variable | Odds Ratio | 95% confidence interval | *p* |
| Age, per 1-year increase | 1.031 | 0.961-1.106 | 0.396 |
| CD4 count at baseline, per 1-cell/μL increase | 1.001 | 0.999-1.002 | 0.330 |
| TDF treatment duration, per 1-year increase | 0.812 | 0.677-0.975 | 0.026 |
| Log10 HBsAg (IU/mL) at baseline, per 1-log increase | 1.220 | 0.527-2.827 | 0.642 |
| HBeAg positivity at baseline | 3.652 | 1.248-10.690 | 0.018 |
| HBV DNA, per 1-IU/mL increase | 1.003 | 0.998-1.008 | 0.185 |

Abbreviations: HBeAg, hepatitis B virus envelope antigen; HBsAg, hepatitis B virus surface antigen; HBV, hepatitis B virus

**Supplemamyary Table 2.** Changes in the renal function, urine protein, metabolic profiles, and bone mineral density of the participants at baseline, week 24 and week 48

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | | Baseline  n=274 | 24 weeks  n=268 | 48 weeks  n=261 | Baseline vs 48 week, *p* |
| **Renal function** | | | | | |
| Serum creatinine, median (IQR), mg/dL | | 0.94 (0.84-1.08) | 0.98 (0.88-1.10) | 1.00 (0.90-1.10) | <0.001 |
| Estimated GFR, median (IQR), mL/min/1.73m2 | | 98.8 (85.6-109.2) | 95.2 (82.6-106.3) | 94.9 (82.4-105.5) | <0.001 |
| Proteinuria on urine dipstick | |  |  |  |  |
| Absent | | 221 (81.0) | 229 (85.8) | 225 (86.5) |  |
| Trace (15 to 30 mg/dL) | | 41 (15.0) | 27 (10.1) | 19 (7.3) |  |
| 1 + (30 to 100 mg/dL) | | 9 (3.3) | 10 (3.8) | 15 (5.8) |  |
| ≥ 2 + (100 to 300 mg/dL) | | 2 (0.7) | 1 (0.4) | 1 (0.4) |  |
| UPCR, median (IQR), mg/g | | 79 (57-114) | 74 (56-98) | 68 (55-96) | <0.001 |
| UPCR, median change from baseline (IQR), % | |  | -6.7 (-29.8-15.6) | -12.3 (-33.8-14.2) |  |
| UACR, median (IQR), mg/g | | 5.0 (3.1-9.8) | 5.4 (3.4-8.6) | 4.5 (3.0-8.3) | 0.016 |
| UACR, median change from baseline (IQR), % | |  | -1.7 (-44.8-77.7) | -15.3 (-46.4-50.0) |  |
| Urineβ-2 microglobulin, median (IQR), ng/mL | | 228 (111-909) | 140 (71-253) | 128 (68-273) | <0.001 |
| Urineβ-2 microglobulin/Cr, median (IQR), μg/g | | 241 (115-968) | 136 (79-264) | 134 (75-270) | <0.001 |
| Urineβ-2 microglobulin/Cr, median change from baseline, median (IQR), % | |  | -48.8 (-75.1 -5.3) | -49.0 (-77.9- 4.3) |  |
| **Lipid profiles and blood glucose** | | | | | |
| Triglyceride median (IQR), mg/dL | | 116 (85-174) | 131 (100-195) | 140 (104-199) | <0.001 |
| Triglyceride, median change from baseline (IQR), mg/dL | |  | 18 (-15-56) | 26 (-17-73) |  |
| Total cholesterol median (IQR), mg/dL | | 166 (149-193) | 198 (174-223) | 192 (167-220) | <0.001 |
| Total cholesterol, median change from baseline (IQR), mg/dL | |  | 31 (8-52) | 23 (4-43) |  |
| LDL-C, median (IQR), mg/dL | | 99 (84-118) | 121 (101-144) | 118 (97-137) | <0.001 |
| LDL-C, median change from baseline (IQR), mg/dL | |  | 22 (4-37) | 19 (4-34) |  |
| HDL-C, median (IQR), mg/dL | | 42 (35-49) | 47 (40-56) | 46 (39-54) | <0.001 |
| HDL-C, median change from baseline (IQR), mg/dL | |  | 5 (0-11) | 4 (-2-9) |  |
| T-CHO:HDL-C ratio, median (IQR) | | 4.0 (3.4-4.7) | 4.2 (3.4-5.1) | 4.2 (3.5-5.0) | <0.001 |
| T-CHO/HDL-C ratio, median change from baseline (IQR) | |  | 0.21 (-0.24-0.63) | 0.22 (-0.20-0.74) |  |
| Fasting blood glucose, median (IQR), mg/dL | | 93 (86-101) | 93 (87-99) | 92 (87-100) | 0.279 |
| HbA1C, median (IQR), % | | 5.4 (5.2-5.7) | 5.4 (5.2-5.6) | 5.4 (5.1-5.6) | 0.064 |
| **Bone mineral density (n=181 at baseline, n=161 at week 24, and n=159 at week 48)** | | | | | |
| Lumbar spine, median (IQR), g/cm2 | | 1.09 (1.01-1.21) | 1.10 (1.03-1.22) | 1.12 (1.03-1.23) | <0.001 |
| Lumbar spine T-score, median (IQR) | | -0.3 (-1.0-0.6) | -0.2 (-0.8-0.7) | -0.1 (-0.8-0.8) | <0.001 |
| Lumbar spine Z-score, median (IQR) | | -0.1 (-0.8-0.8) | -0.0 (-0.8-0.8) | 0.1 (-0.7-0.9) | <0.001 |
| Lumbar spine | Normal, n (%) | 140/180 (77.8) | 132/160 (82.5) | 128/158 (81.0) |  |
| Osteopenia, n (%) | 37/180 (20.6) | 25/160 (15.6) | 29/158 (18.4) |  |
| Osteoporosis, n (%) | 3/180 (1.7) | 3/160 (1.9) | 1/158 (0.6) |  |
| Hip, median (IQR), g/cm2 | | 0.91 (0.81-1.00) | 0.91 (0.83-1.01) | 0.90 (0.82-1.02) | <0.001 |
| Hip T-score, median (IQR) | | -0.5 (-1.2-0.3) | -0.4 (-1.1-0.4) | -0.5 (-1.1-0.4) | 0.006 |
| Hip Z-score, median (IQR) | | -0.2 (-0.9-0.5) | 0.0 (-0.9-0.6) | -0.1 (-0.8-0.7) | <0.001 |
| Hip | Normal, n (%) | 125/181 (69.1) | 119/161 (73.9) | 118/159 (74.2) |  |
| Osteopenia, n (%) | 50/181 (27.6) | 38/161 (23.6) | 39/159 (24.5) |  |
| Osteoporosis, n (%) | 6/181 (3.3) | 4/161 (2.5) | 2/159 (1.3) |  |

Abbreviations: Cr, creatinine; GFR, glomerular filtration rate; HDL-C, high-density lipoprotein cholesterol; IQR, interquartile range; LDL-C, low-density lipoprotein cholesterol; UACR, urine albumin-to-urine creatinine ratio; UPCR, urine protein-to-urine creatinine ratio

**Supplementary Table 3.** Baseline demographic and clinical characteristics of the participants who underwent bone mineral density (BMD) assessment and those who did not undergo the assessment

|  |  |  |  |
| --- | --- | --- | --- |
|  | BMD  n=181 | No BMD  n=93 | *p* |
| Age, median (IQR), years | 41 (37-48) | 41 (36-46) | 0.355 |
| Male sex, n (%) | 178 (98.3) | 91 (97.8) | 0.999 |
| Men who have sex with men, n (%) | 160 (88.4) | 78 (83.9) | 0.294 |
| Injecting drug users, n (%) | 11 (6.1) | 9 (9.7) | 0.278 |
| Years since HIV diagnosis, median (IQR) | 7.9 (4.7-11.3) | 5.9 (3.2-9.5) | 0.004 |
| Duration of TDF use, median (IQR), years | 4.7 (3.1-6.3) | 2.6 (1.7-4.1) | <0.001 |
| Anti-HCV positivity, n (%) | 26/176 (14.8) | 10/90 (11.1) | 0.409 |
| Anti-HDV positivity, n (%) | 31/181 (17.1) | 9/93 (9.7) | 0.098 |
| Positive RPR titer, n (%) | 74/179 (41.3) | 45/92 (48.9) | 0.234 |
| Plasma HIV RNA <50 copies/mL, n (%) | 181 (100) | 93 (100) | 0.999 |
| CD4 count, median (IQR), cells/μL | 590 (440-723) | 547 (403-718) | 0.199 |
| ALT, median (IQR), IU/mL | 26 (20-37) | 26 (20-35) | 0.587 |
| AST, median (IQR), IU/mL | 25 (21-30) | 25 (21-32) | 0.250 |
| Cirrhosis of the liver, n (%) | 2/165 (1.2) | 2/85 (2.4) | 0.607 |
| Serum creatinine, median (IQR), mg/dL | 0.90 (0.80-1.03) | 0.96 (0.85-1.10) | 0.314 |
| eGFR, median (IQR), mL/min/1.73m2 | 99.2 (86.6-110.3) | 98.7 (82.7-107.5) | 0.326 |
| HBV DNA and serological markers |  |  |  |
| Plasma HBV DNA <20 IU/mL, n (%) | 173 (95.6) | 85 (91.4) | 0.162 |
| HBeAg positivity, n (%) | 23 (12.7) | 12 (12.9) | 0.963 |
| Anti-HBe positivity, n (%) | 133 (73.5) | 73 (78.5) | 0.363 |
| HBsAg positivity, n (%) | 181 (100) | 93 (100) | 0.999 |
| HBsAg level, median (IQR), IU/mL | 718 (92-1735) | 618 (87-1616) | 0.960 |
| HBsAg level, median (IQR), Log10 IU/mL | 2.86 (1.97-3.24) | 2.79 (1.95-3.21) | 0.952 |
| Positive or equivocal anti-HBs Ab, n (%) | 4 (2.2) | 1 (1.1) | 0.665 |
| Third agent of ART at inclusion, n (%) |  |  |  |
| NNRTI | 130 (71.8) | 68 (73.1) | 0.821 |
| Protease inhibitor | 37 (20.4) | 17 (18.3) | 0.670 |
| Integrase inhibitor | 14 (7.7) | 8 (8.6) | 0.802 |
| Diabetes mellitus, n (%) | 6 (3.3) | 3 (3.2) | 0.999 |
| Hypertension, n (%) | 12 (6.6) | 6 (6.5) | 0.955 |

**Abbreviations:** ALT,alanine transaminase*;* ART, anti-retroviral therapy; AST, aspartate transaminase*;* eGFR, estimated glomerular filtration rate; HBeAg, hepatitis B virus envelope antigen; HBsAg, hepatitis B surface antigen; HCV, hepatitis C virus; HDV, hepatitis D virus; IQR, interquartile range; NNRTI, non-nucleoside reverse transcriptase inhibitor; RPR, rapid plasma reagin; TDF, tenofovir disoproxil fumarate

**Supplementary Figure 1.** Changes in quantitative HBsAg level through week 48 among the HIV/HBV-coinfected patients with or those without HBeAg positivity.

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**Supplementary Figure 2.** (A) Proportion of patients with anti-HDV positivity through week 48 and (B) quantitative HDV RNA of the patients with anti-HDV positivity and detectable HDV DNA level

**(A)**

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**(B)**

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