# Supplementary Data

Supplementary Table S1. Median Time in Seconds to Complete 4-m Walk by Gait Speed Trajectory Group

| *Year* | *Persistently normal gait* (n = *813*) | *Development of slow gait* (n = *52*) | *Resolution of slow gait* (n = *38*) | *Persistently slow gait* (n = *26*) | *Total* (n = *929*) |
|---|---|---|---|---|---|
| Baseline | 3.73 | 4.63 | 5.87 | 6.24 | 3.83 |
| Year 1 | 3.78 | 5.32 | 4.97 | 6.19 | 3.89 |
| Year 2 | 3.83 | 5.45 | 4.99 | 6.19 | 3.93 |
| Year 3 | 3.88 | 5.98 | 4.75 | 6.79 | 4.00 |

Supplementary Table S2. Age-Adjusted Analysis of Associations Between Baseline Covariates and Gait Speed Trajectory Groups

| *Baseline characteristics* | *Development of slow gait (OR, 95% CI)* | *Resolution of slow gait (OR, 95% CI)* |
|---|---|---|
| Age (years) | 1.01 (0.97–1.04) $p = .74$ | 0.93 (0.88–0.99) $p = .023$ |
| Female | ***2.78 (1.53–5.03) p = .001*** | 0.41 (0.13–1.25) $p = .12$ |
| Race: Black vs. white | ***4.12 (2.09–8.12) p ≤ .001*** | 0.55 (0.17–1.72) $p = .30$ |
| Race: Hispanic vs. white | ***2.18 (0.96–4.98) p = .063*** | 0.70 (0.15–3.36) $p = .66$ |
| Education (≥12 years) | ***0.53 (0.27–1.04) p = .064*** | 1.00 (0.28–3.60) $p = 1.00$ |
| Hemoglobin A1C (%) | ***1.39 (1.10–1.75) p = .005*** | 0.81 (0.55–1.19) $p = .29$ |
| Body mass index (kg/m$^2$) | ***1.04 (0.99–1.09) p = .096*** | ***0.92 (0.85–1.00) p = .038*** |
| High waist circumference | ***1.90 (1.08–3.34) p = .025*** | ***0.41 (0.14–1.17) p = .094*** |
| Physical activity: ≥3 days on either vigorous or moderate | 0.83 (0.47–1.48) $p = .54$ | 1.42 (0.45–4.48) $p = .55$ |
| Alcohol: heavy drinker vs. abstainer | 0.60 (0.27–1.36) $p = .22$ | 1.62 (0.28–9.43) $p = .59$ |
| Alcohol: light drinker vs. abstainer | ***0.44 (0.23–0.87) p = .019*** | 1.30 (0.37–4.55) $p = .69$ |
| Alcohol: moderate drinker vs. abstainer | 0.56 (0.17–1.91) $p = .36$ | 0.92 (0.00, I) $p = 1.00$ |
| Substance use within past month at entry | 0.51 (0.22–1.15) $p = .10$ | 0.77 (0.16–3.80) $p = .75$ |
| Anti-anxiety or depression medications | 0.98 (0.53–1.79) $p = .94$ | 0.51 (0.18–1.44) $p = .21$ |
| Nadir CD4: 200–350 vs. <200 cells/$\mu$L | 0.71 (0.37–1.35) $p = .29$ | 0.48 (0.16–1.46) $p = .20$ |
| Nadir CD4: >350 vs. <200 cells/$\mu$L | 0.66 (0.28–1.53) $p = .33$ | 0.68 (0.15–2.98) $p = .61$ |
| NPZ3 score | ***0.62 (0.47–0.81) p = .001*** | 1.31 (0.81–2.10) $p = .270$ |
| NCI | ***2.89 (1.55–5.38) p = .001*** | 1.11 (0.37–3.28) $p = .86$ |
| INSTI use at HAILO entry | 1.03 (0.53–2.01) $p = .92$ | 0.76 (0.24–2.39) $p = .63$ |
| TDF use at HAILO entry | 0.95 (0.49–1.86) $p = .88$ | 2.11 (0.73–6.13) $p = .17$ |
| PI use at HAILO entry | 0.00 (0.00, I) $p = .99$ | 0.48 (0.04–5.78) $p = .56$ |
| INSTI use at randomization | 1.48 (0.67–3.27) $p = .33$ | 0.52 (0.09–2.85) $p = .45$ |
| TDF use at randomization | 1.23 (0.70–2.17) $p = .47$ | 0.69 (0.24–1.93) $p = .48$ |
| PI use at randomization | 0.65 (0.37–1.15) $p = .14$ | 1.11 (0.41–3.03) $p = .83$ |
| Any previous exposure to DDI/D4T/AZT | 1.18 (0.66–2.11) $p = .57$ | 2.20 (0.78–6.20) $p = .13$ |
| Cigarette use: current vs. never | 1.55 (0.80–3.00) $p = .20$ | 0.42 (0.12–1.50) $p = .18$ |
| Cigarette use: former vs. never | 0.85 (0.42–1.72) $p = .65$ | 0.51 (0.15–1.74) $p = .28$ |
| Suppressed VL (<50 copies/mL) | 0.81 (0.31–2.11) $p = .66$ | 0.39 (0.04–3.77) $p = .42$ |
| Still on initial randomized therapy at HAILO entry | 1.04 (0.58–1.86) $p = .89$ | 0.46 (0.16–1.31) $p = .15$ |
| Peripheral neuropathy at HAILO entry | ***1.72 (0.97–3.05) p = .064*** | 1.05 (0.36–‘3.04) $p = .93$ |

Characteristics were measured at baseline unless otherwise indicated. Covariates with $p < .1$ (*italicized* and in *bold*) were included in the final, multivariable models.

ART, antiretroviral therapy; AZT, zidovudine; CD4, CD4$^+$ T lymphocyte count; D4T, stavudine; DDI, didanosine; HAILO, HIV Infection, Aging, and Immune Function Long-term Observational Study; HIV, human immunodeficiency syndrome; INSTI, integrase strand transfer inhibitor; NCI, neurocognitive impairment; PI, protease inhibitor; TDF, tenofovir.