**Table e-1**: Demographics and clinical characteristics of HIV+ and HIV- participants who were lost to follow-up versus those who completed the study

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | HIV- | |  |  | HIV+ | |  |
|  | Completed  (*n*=35) | LTFU  (*n*=7) | *p* |  | Completed  (*n*=73) | LTFU  (*n*=11) | *p* |
| Age (M, SD) | 54.0 (5.3) | 51.3 (5.3) | 0.27 |  | 55.1 (6.3) | 52.1 (6.9) | 0.15 |
| Education (y) (M, SD) | 15.0 (2.7) | 16.1 (2.4) | 0.35 |  | 14.1 (2.8) | 13.3 (3.3) | 0.37 |
| Premorbid IQ (M, SD) | 111.0 (5.9) | 115.6 (4.4) | 0.05 |  | 108.7 (7.7) | 107.5 (7.6) | 0.61 |
| GDS (M, SD) | 0.28 (0.33) | 0.14 (0.13) | 0.08 |  | 0.71 (0.64) | 0.53 (0.43) | 0.24 |
| GDS (n, %)  Unimpaired  Impaired | 29 (83%)  6 (17%) | 7 (100%)  0 (0%) | 0.24 |  | 35 (48%)  38 (52%) | 5 (45%)  6 (55%) | 0.88 |
| Depression (n, %)  Not depressed  Mildly depressed  Moderately depressed  Severely depressed | 33 (94%)  0 (0%)  2 (6%)  0 (0%) | 5 (71%)  1 (14%)  1 (14%)  0 (0%) | 0.05 |  | 61 (84%)  5 (7%)  6 (8%)  1 (1%) | 8 (73%)  0 (0%)  2 (18%)  1 (9%) | 0.23 |
| HIV disease duration (M, SD) |  |  |  |  | 18.6 (6.9) | 21.3 (5.9) | 0.22 |
| Past HAND (n, %)  No  Yes |  |  |  |  | 61 (84%)  12 (16%) | 9 (82%)  2 (18%) | 0.88 |
| AIDS Status  AIDS  Non-AIDS |  |  |  |  | 52 (71%)  21 (29%) | 7 (64%)  4 (36%) | 0.72 |
| Nadir CD4 (Med, IQR) |  |  |  |  | 374 (210-517) | 186 (146-462) | .13 |
| Baseline CD4 (Med, IQR) |  |  |  |  | 560 (362-723) | 357 (253-552) | .14 |
| Baseline HIV RNA Status  Undetectable  Detectable |  |  |  |  | 71 (97%)  2 (3%) | 11 (100%)  0 (0%) | 0.58 |
| HIV RNA Status across study period  Always undetectable  Detectable |  |  |  |  | 67 (92%)  6 (8%) | 6 (55%)  5 (45%) | <0.004 |
| cART change over study period  No  Yes |  |  |  |  | 62 (85%)  11 (15%) | 9 (82%)  2 (18%) | 0.79 |

Comparisons were conducted using t-test, Wilcoxon test, and Chi-square as appropriate

Note1. GDS= Global Deficit Score, a higher score indicates impairment; LTFU=lost to follow-up

Note 2. The cohort is composed of a majority of men who have sex with men (MSM) with a high level of pre-morbid cognitive functioning and highly successful HIV treatment outcomes. Recruitment sites for both HIV+ and HIV- groups were in close geographical proximity to ensure a similar match of lifestyle and demographic factors between the groups.

*Baseline criteria of enrolment*: HIV+ participants were recruited through the HIV and Neurology clinics at St Vincent’s Hospital between 2009 and 2011. Inclusion criteria required HIV+ participants to i) be ≥45 years old, ii) be stable on combined antiretroviral therapy (cART) for >6 months, iii) nadir CD4 ≤350/µL and iv) have been HIV+ for more than 5 years. HIV- participants were recruited through advertising in metropolitan Sydney, at Holdsworth House Medical Practice, St Vincent’s Hospital and UNSW campuses from 2009 to 2013. Inclusion criteria for the HIV- group required participants to be i) ≥45 years and ii) HIV- on an enzyme-linked immunosorbent assay (ELISA) test within the past three months at both baseline and follow-up. Exclusion criteria for both groups included i) history of a neurological disorder (e.g., dementia, epilepsy, traumatic brain injury), although a history of HIV-related dementia/epilepsy was not excluded in the HIV+ group, ii) psychiatric disorder on the psychotic axis (e.g., schizophrenia), iii) any current substance or alcohol use disorder (within 12 months of study enrolment), iv) loss of consciousness (LOC) for greater than 30 minutes, v) active Hepatitis C infection, vi) not proficient in English.