**Hepatitis C virus cure does not impact kidney function decline in HIV co-infected patients**

**Supplemental Digital Content**

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Supplemental Table 1: Characteristics of 1,726 patients at enrollment in the Canadian Co-Infection Cohort (CCC), 2003-2016

|  |  |  |  |
| --- | --- | --- | --- |
|  | Chronically Infected(n = 1,631) | Spontaneous Clearers(n = 42) | Previous Sustained Virologic Response (n = 53) |
| Median age (IQR), years | 45 (39, 51) | 45 (40, 49) | 47 (42, 51) |
| Female | 455 (28%) | 22 (52%) | 9 (17%) |
| African/Caribbean ethnicity  | 58 (4%) | 0 | 2 (4%) |
| Aboriginal ethnicity | 378 (23%) | 10 (24%) | 7 (13%) |
| History of any injection drug use | 1,332 (82%) | 39 (93%) | 37 (70%) |
| Any active injection drug use | 602 (37%) | 17 (40%) | 7 (13%) |
| Current alcohol consumption | 840 (52%) | 17 (40%) | 28 (53%) |
| Current smoking | 1,238 (76%) | 33 (79%) | 27 (51%) |
| Current antiretroviral therapy use | 1,347 (83%) | 35 (83%) | 47 (89%) |
| Median CD4+ count (IQR), cells/μL | 400 (250, 580) | 385 (260, 543) | 490 (320, 700) |
| Detectable HIV RNA ≥ 50 copies/mL | 560 (34%) | 13 (31%) | 15 (28%) |
| Previous AIDS diagnosis | 398 (24%) | 12 (29%) | 12 (23%) |
| Current tenofovir use | 750 (46%) | 13 (31%) | 24 (45%) |
| Current protease inhibitor use a | 612 (38%) | 21 (50%) | 22 (42%) |
| Median highest log10 HCV Load (IQR), IU/mL | 6.11 (5.25, 6.69) | NA | NA |
| Median duration of HCV infection (IQR), years | 18 (10, 26) | 19 (13, 24) | 23 (13, 29) |
| Hypertension | 146 (9%) | 5 (12%) | 7 (13%) |
| Diabetes | 73 (4%) | 1 (2%) | 2 (4%) |
| End-stage liver disease | 148 (9%) | 3 (7%) | 5 (9%) |
| Median eGFR (IQR), mL/min/1.73 m2 | 102 (89, 111) | 96 (81, 105) | 97 (86, 107) |

Values are n (%), unless otherwise indicated.

AIDS, acquired immune deficiency syndrome; eGFR, estimated glomerular filtration rate; HCV, hepatitis C virus; IQR, interquartile range; IU, international units.

a Lopinavir/ritonavir or atazanavir, with or without ritonavir

Supplemental Table 2: Adjusted population-averaged linear model of illicit drug risk factors for kidney function decline in HCV-HIV co-infected patients who achieved SVR (n = 384)

|  |  |
| --- | --- |
|  | Model coefficients(95% CI) |
| Annual rate of change in eGFR | −0.67 (−1.14, −0.20) |
| Injection cocaine | −2.91 (−7.03, 1.22) |
| Injection cocaine \* time (years) | −1.49 (−3.49, 0.51) |
| Injection opiates | 2.94 (−1.47, 7.35) |
| Injection opiates \* time (years) | −0.51 (−2.57, 1.55) |
| Non-injection crack/cocaine | −1.56 (−4.64, 1.52) |
| Non-injection crack/cocaine \* time (years) | 0.20 (−0.90, 1.31) |
| Non-injection opiates | 2.08 (−1.19, 5.35) |
| Non-injection opiates \* time (years) | −0.30 (−1.45, 0.84) |
| Baseline age (per year increase)  | −1.20 (−1.30, −1.09) |
| Female | −11.5 (−13.6, −9.39) |
| Aboriginal ethnicity | 1.00 (−2.33, 4.33) |
| African/Caribbean ethnicity | 17.2 (13.5, 20.9) |
| Duration of HCV infection (per year increase) | −0.09 (−0.17, −0.01) |
| Liver fibrosis (APRI ≥ 1.5) | 1.67 (−3.16, 6.51) |
| CD4+ count < 500 cells/μL | 1.58 (−0.13, 3.28) |
| Detectable HIV viremia (≥ 50 copies/mL) | −0.26 (−2.84, 2.31) |
| Intercept | 89.5 (87.9, 91.0) |

APRI, aspartate aminotransferase-to-platelet ratio index; CI, confidence interval; eGFR, estimated glomerular filtration rate; HCV, hepatitis C virus; SVR, sustained virologic response.

Supplemental Figure: Study participant flow chart, Canadian Co-Infection Cohort (2003-2016)

73 failed HCV treatment

384 developed sustained virologic response

457 with known HCV treatment results
and available follow-up

52 have no
post-HCV treatment follow-up

509 with known HCV treatment results

53 unknown HCV treatment results

562 treated for chronic HCV during follow-up

1,069 not treated during follow-up

53 sustained virologic response prior to enrollment

42 spontaneous clearers
at enrollment

1,631 chronically infected with HCV

1,726 HCV-HIV patients enrolled in the
Canadian Co-Infection Cohort

HCV, hepatitis C virus.