

**Supplemental Table 1.** Crude and adjusted associations between AUD diagnosis and recent, self-reported alcohol use and viral non-suppression (last viral load measurement >20 copies/mL) among patients in the Johns Hopkins HIV Clinical Cohort who completed  $\geq 1$  self-reported survey about alcohol use, 2014-2018

|                            | Prevalence<br>of viral non-<br>suppression | Crude            |                   | Adjusted for confounding <sup>a</sup> |                   | Adjusted for confounding and<br>measurement error <sup>b</sup> |                   |
|----------------------------|--|------------------|-------------------|---------------------------------------|-------------------|--|-------------------|
|                            |  | PD               | PR                | PD                                    | PR                | PD   | PR                |
| No diagnosis               |  |                  |                   |                                       |                   |  |                   |
| No use                     | 20.8                                       | 0.               | 1.                | 0.                                    | 1.                | 0.   | 1.                |
| Moderate use               | 21.6                                       | 0.8 (-4.3, 5.9)  | 1.04 (0.82, 1.32) | 2.0 (-3.8, 7.8)                       | 1.09 (0.85, 1.41) | 2.0 (-5.9, 10.0)   | 1.09 (0.76, 1.57) |
| High-risk use <sup>c</sup> | 23.6                                       | 2.8 (-3.3, 8.9)  | 1.14 (0.87, 1.48) | 2.5 (-5.0, 9.9)                       | 1.11 (0.81, 1.53) | 2.8 (-7.2, 12.9)   | 1.13 (0.73, 1.75) |
| Prior diagnosis            |  |                  |                   |                                       |                   |  |                   |
| No use                     | 22.5                                       | 1.8 (-5.6, 9.1)  | 1.08 (0.78, 1.51) | -1.1 (-10.4, 8.2)                     | 0.95 (0.61, 1.49) | 1.1 (-8.7, 10.9)   | 1.04 (0.66, 1.64) |
| Moderate use               | 30.1                                       | 9.3 (-0.5, 19.1) | 1.45 (1.03, 2.04) | 5.4 (-6.2, 16.9)                      | 1.25 (0.80, 1.94) | 6.9 (-6.3, 20.2)   | 1.32 (0.80, 2.19) |
| High-risk use <sup>c</sup> | 33.6                                       | 12.9 (3.4, 22.3) | 1.62 (1.20, 2.19) | 6.2 (-4.0, 16.4)                      | 1.29 (0.88, 1.88) | 6.6 (-6.6, 19.9)   | 1.30 (0.78, 2.19) |

\* Abbreviations: AUD, alcohol use disorder; IDU, injection drug use; MSM, men who have sex with men; PD, prevalence difference; PR, prevalence ratio

<sup>a</sup> Adjusted for birth sex, age, black race, HIV acquisition risk factors (MSM, IDU), CD4 cell count, history of an opioid use disorder, years in care

<sup>b</sup> Assumes sensitivity of a diagnosis of alcohol abuse or dependence, or alcohol dependence is 56% sensitive (95% credible interval: 25%, 85%) and 98% specific (95% credible interval: 85%, 100%) for a true AUD

<sup>c</sup> Defined as  $\geq 7$  drinks/week for women or  $\geq 14$  drinks/week for men or any instances of binge drinking ( $\geq 4$  drinks on one occasion for women or  $\geq 5$  drinks on one occasion for men)