

Supplementary materials

Harmonizing alcohol data, taken from S.M. Ingle et al; Harmonisation of data on alcohol use across a multi-national HIV cohort collaboration (unpublished).

AUDIT-C score

Several cohorts ('AUDIT-C cohorts') collected alcohol data using the AUDIT-C tool: a three-item questionnaire which returns a score from 0-12 where increasing score means higher risk alcohol use.

Grams of alcohol per day

For the cohorts which did not collect alcohol data using the AUDIT-C tool, we calculated alcohol use as grams of alcohol per day. Several non-AUDIT-C cohorts recorded the actual number of drinks/units per week/day. The Italian (standard drink=12g) ICONA cohort recorded number of glasses of wine/bottles of beer/shots per day. The Canadian (standard drink=13.6g) Alberta cohort recorded a categorical variable: Level I (<9 drinks per week for women, <14 drinks per week for men), Level II (≥9 drinks per week for women, ≥14 drinks per week for men), None. We took the mid-point for Level I and the lowest value for Level II. The German (standard drink=12g) For those who drink, we took the mid-point of the category to define grams of alcohol. The French (standard drink=10g) FHDH cohort recorded a categorical variable: 0, <4 glasses per day, 4-8 glasses per day, >8 glasses per day, non-drinker, ex-drinker. For those who drink, we took the mid-point of the category to define grams of alcohol.

To allow comparisons between the AUDIT-C and non-AUDIT-C cohorts, we used AUDIT-C items one (frequency of drinking) and two (number of drinks on a typical day of drinking) to calculate grams of alcohol per day (1 drink=14g, except Switzerland 10g) for the AUDIT-C cohorts.

Due to the available mid-point values, alcohol use was categorised as: non-drinker (0 grams per day), moderate drinker (0.1-20 grams per day) and heavy drinker (20 grams or more per day).

Contribution of alcohol use in HIV/hepatitis C virus co-infection to all-cause and cause-specific mortality: a collaboration of cohort studies

SUPPLEMENTARY MATERIALS

Supplementary table 1: Unadjusted mortality hazard ratios for alcohol use categories, stratified by calendar year period and HCV status (negative, positive), splitting follow-up time by HCV status.

Alcohol use (grams per day)	All patients		HCV negative		HCV positive		Interaction p-value
	Mortality rate per 1000 person-years (95% CI)	HR (95% CI)	Mortality rate per 1000 person-years (95% CI)	HR (95% CI)	Mortality rate per 1000 person-years (95% CI)	HR (95% CI)	
Follow-up between 2001-2017 (N=58769)							
Unadjusted							<0.001
0.0g	7.3 (7.0-7.7)	1.35 (1.25-1.46)	6.1 (5.8-6.4)	1.35 (1.24-1.47)	21.5 (19.5-23.7)	1.10 (0.95-1.28)	
0.1-20.0g	6.6 (6.3-7.0)	1	5.5 (5.2-5.9)	1	21.4 (19.0-24.0)	1	
>20.0g	12.8 (11.8-13.9)	2.17 (1.94-2.41)	10.5 (9.5-10.7)	2.06 (1.82-2.33)	28.6 (24.2-33.7)	1.74 (1.42-2.13)	
Follow-up between 2001-2013 (N=46174)							
Unadjusted							<0.001
0.0g	6.4 (5.9-6.8)	1.32 (1.18-1.48)	5.0 (4.6-5.4)	1.34 (1.18-1.53)	19.2 (17.0-21.8)	1.03 (0.85-1.26)	
0.1-20.0g	5.8 (5.3-6.2)	1	4.5 (4.1-4.9)	1	19.4 (16.7-22.5)	1	
>20.0g	11.8 (10.4-13.3)	2.25 (1.92-2.63)	9.2 (7.9-10.7)	2.14 (1.77-2.58)	26.3 (21.2-32.6)	1.73 (1.32-2.26)	
Follow-up between 2014-2017 (N=54884)							
Unadjusted							<0.001
0.0g	8.4 (7.9-9.0)	1.41 (1.27-1.56)	7.3 (6.9-7.9)	1.40 (1.25-1.56)	26.1 (22.4-30.3)	1.21 (0.96-1.54)	
0.1-20.0g	7.6 (7.0-8.1)	1	6.6 (6.1-7.2)	1	25.0 (20.9-29.9)	1	
>20.0g	13.9 (12.3-15.7)	2.11 (1.82-2.45)	12.0 (10.4-13.7)	2.03 (1.72-2.40)	32.7 (25.2-42.4)	1.68 (1.22-2.31)	

Supplementary table 2: Adjusted* mortality hazard ratios for alcohol use categories post-2014 for PWH that had ever had HCV**.

Adjusted mortality hazard ratios (95% confidence interval) (interaction term p-value 0.0063)			
Alcohol use (grams per day)	All observations (n=8973)	Previously HCV-positive (n=2813)	Currently HCV-positive (n=4807)
0.0g	1.08 (0.84-1.38)	1.51 (0.91-2.51)	0.98 (0.74-1.29)
0.1-20.0g	1	1	1
>20.0g	1.32 (0.93-1.88)	2.32 (1.16-4.63)	1.13 (0.76-1.69)

*The covariates included were HIV acquisition group, female, prior AIDS status, age, CD4 count cells/ μ L, and log HIV-1 RNA copies/mL.

**Multiple time periods (observations) are included per patient, split by time of HCV infection and cure/spontaneous clearances. There are 333 deaths among 4576 subjects, with 8973 observations.