

Web Table 1. Median and IQRs of Ages at Enrollment and Ages at Study Baseline, MACS and WIHS Individuals, Stratified by HIV Status and HAART Era (Pre-HAART: 1984-1995, HAART: 1996-2008)

	1984-1995, MACS				1996-2008, MACS				1996-2008, WIHS			
	HIV-negative		HIV-positive		HIV-negative		HIV-positive		HIV-negative		HIV-positive	
	Median	IQR	Median	IQR	Median	IQR	Median	IQR	Median	IQR	Median	IQR
Age at enrollment	34.9	30.4, 40.4	34.0	30.2, 38.1	35.1	29.8, 41.0	34.0	29.1, 39.7	36.0	31.4, 40.8	37.0	32.7, 41.8
Age at analysis baseline ^a	35.0	35.0, 40.4	35.0	35.0, 39.0	43.5	38.5, 49.0	41.3	36.9, 46.0	36.5	35.0, 41.3	37.7	35.0, 42.5

HAART= Highly active antiretroviral therapy; HIV= human immunodeficiency virus; IQR= interquartile range; MACS= Multicenter AIDS Cohort Study; WIHS= Women’s Interagency HIV Study.

^a Values at baseline, defined as earliest study visit after age 35 within the calendar period with specified HIV status.

Web Table 2. Causes of Non-AIDS Death Among MACS and WIHS Individuals, Stratified by HIV Status and HAART Era (Pre-HAART: 1984-1995, HAART: 1996-2008)^a

	1984-1995, MACS		1996-2008, MACS		1996-2008, WIHS		TOTAL
	% of HIV-negative (n=51)	% of HIV-positive (n=58)	% of HIV-negative (n=80)	% of HIV-positive (n=84)	% of HIV-negative (n=53)	% of HIV-positive (n=241)	% of total (n=567)
Cardiovascular	35	33	25	24	8	16	21
Injury or poisoning	29	12	10	23	23	24	21
Non-AIDS malignancies	16	10	15	15	13	19	16
Liver-related	0	5	1	8	6	20	11
Pulmonary	10	10	3	10	15	3	6
Renal	0	5	0	4	6	6	4
Gastrointestinal	0	3	3	4	0	4	3
All other causes	10	21	44	13	30	9	18

AIDS= acquired immune deficiency syndrome; HAART = highly active antiretroviral therapy; HIV= human immunodeficiency virus; MACS = Multicenter AIDS Cohort Study; WIHS = Women's Interagency HIV Study.

^a Mortality categories adopted from French AL, Gawe SH, Hershov R, et al. Trends in mortality and causes of death among women with HIV in the United States: a 10-year study. *J Acquir Immune Defic Syndr.* 2009;51(4):399-406.

Web Table 3. Cause-Specific Hazard Ratios From a Multivariate Model Among MACS Individuals, Comparing the Pre-HAART Era (1984-1995) to the HAART Era (1996-2008)

	HIV-negative death		HIV-positive non-AIDS death		HIV-positive AIDS death	
	HR	95% CI	HR	95% CI	HR	95% CI
HAART era	0.77	0.44, 1.34	0.67	0.44, 1.03	^b 0.10*	0.08, 0.12
< College education	1.86*	1.29, 2.69	1.35	0.93, 1.97	1.20*	1.07, 1.35
Unemployment	1.22	0.73, 2.02	1.60*	1.08, 2.36	1.74*	1.51, 2.02
>13 alcoholic drinks/week	1.86*	1.20, 2.87	1.28	0.80, 2.05	0.91	0.78, 1.08
Injection drug use history	2.66*	1.55, 4.57	^a 1.00	0.61, 1.64	0.99	0.83, 1.16
Depression	1.60*	1.07, 2.38	1.09	0.77, 1.54	1.24*	1.09, 1.41
Hepatitis B or C infection	2.55*	1.44, 4.53	1.87*	1.21, 2.90	^b 1.08	0.88, 1.33
Years of age at enrollment	0.98	0.95, 1.02	1.01	0.98, 1.04	^b 0.94*	0.92, 0.95

AIDS= acquired immune deficiency syndrome; CI = confidence interval; HAART = highly active antiretroviral therapy; HIV= human immunodeficiency virus; HR = estimated hazard ratio; MACS = Multicenter AIDS Cohort Study.

* indicates $P < 0.05$.

^a indicates significant difference ($P < 0.05$) between HIV-negative hazard ratio and HIV-positive non-AIDS hazard ratio.

^b indicates significant difference ($P < 0.05$) between HIV-positive non-AIDS hazard ratio and AIDS hazard ratio.

Web Table 4. Sensitivity Analysis: Cause-Specific Hazard Ratios From a Multivariate Model Among MACS and WIHS Individuals in the HAART Era, 1996-2008, All Unknown Deaths Classified As AIDS-Related

	HIV-negative death		HIV-positive non-AIDS death		HIV-positive AIDS death	
		95 CI		95 CI		95 CI
WIHS membership	0.96	0.58, 1.57	1.24	0.92, 1.67 ^b	0.74*	0.62, 0.88
Unemployment	1.75*	1.12, 2.75	1.94*	1.44, 2.63	2.25*	1.86, 2.71
Smoking history	1.37	0.84, 2.23	1.54*	1.10, 2.18	1.20	0.99, 1.46
Injection drug use history	3.27*	2.08, 5.14 ^a	1.34	1.00, 1.79	1.13	0.93, 1.36
Depression	1.34	0.93, 1.94	1.45*	1.15, 1.83	1.36*	1.17, 1.58
Hepatitis B or C infection	2.49*	1.56, 3.97	1.96*	1.49, 2.59 ^b	1.35*	1.12, 1.64

AIDS= acquired immune deficiency syndrome; CI = confidence interval; HAART = highly active antiretroviral therapy; HIV= human immunodeficiency virus; = estimated hazard ratio; MACS = Multicenter AIDS Cohort Study; WIHS = Women’s Interagency HIV Study.

* indicates $P < 0.05$.

^a indicates significant difference ($P < 0.05$) between HIV-negative hazard ratio and HIV-positive non-AIDS hazard ratio.

^b indicates significant difference ($P < 0.05$) between HIV-positive non-AIDS hazard ratio and AIDS hazard ratio.

Web Table 5. Sensitivity Analysis: Cause-Specific Hazard Ratios From a Multivariate Model Among MACS and WIHS Individuals in the HAART Era, 1996-2008, All Unknown Deaths Classified As Non-AIDS-Related

	HIV-negative death		HIV-positive non-AIDS death		HIV-positive AIDS death	
	HR	95 CI	HR	95 CI	HR	95 CI
WIHS membership	0.96	0.58, 1.57	0.88	0.70, 1.10	0.83	0.68, 1.01
Unemployment	1.75*	1.12, 2.75	1.77*	1.40, 2.24	^b 2.53*	2.04, 3.14
Smoking history	1.37	0.84, 2.23	1.45*	1.11, 1.91	1.17	0.94, 1.45
Injection drug use history	3.27*	2.08, 5.14	^a 1.43*	1.13, 1.81	^b 1.03	0.83, 1.27
Depression	1.34	0.93, 1.94	1.39*	1.15, 1.68	1.38*	1.17, 1.64
Hepatitis B or C infection	2.49*	1.56, 3.97	1.70*	1.35, 2.13	1.40*	1.13, 1.74

AIDS= acquired immune deficiency syndrome; CI = confidence interval; HAART = highly active antiretroviral therapy; HIV= human immunodeficiency virus; HR = estimated hazard ratio; MACS = Multicenter AIDS Cohort Study; WIHS = Women’s Interagency HIV Study.

* indicates $P < 0.05$.

^a indicates significant difference ($P < 0.05$) between HIV-negative hazard ratio and HIV-positive non-AIDS hazard ratio.

^b indicates significant difference ($P < 0.05$) between HIV-positive non-AIDS hazard ratio and AIDS hazard ratio.

Web Table 6. Cause-Specific Mortality Among MACS Participants With Known Date of Seroconversion, by HAART Era, by Duration of Infection Prior to Baseline^a, and by Year of Seroconversion

	1984-1995 (Pre-HAART era)				1996-2008 (HAART era)			
	n (Median age at entry)		n (Median age at death)		n (Median age at entry)		n (Median age at death)	
	Total	AIDS death	Non-AIDS death	Unknown death	Total	AIDS death	Non-AIDS death	Unknown death
Time from HIV infection to baseline^a								
<0 years	-	-	-	-	-	-	-	-
0-2 years	245 (39.2)	75 (46.0)	16 (50.0)	1 (42.4)	74 (45.5)	1 (56.6)	1 (60.2)	2 (55.3)
2-4 years	48 (35.0)	15 (38.4)	-	-	28 (40.3)	4 (51.0)	-	3 (50.7)
4-6 years	37 (35.0)	9 (37.8)	-	1 (37.9)	51 (42.2)	9 (46.7)	5 (58.8)	-
6-8 years	23 (35.0)	3 (36.4)	-	-	54 (39.4)	13 (42.8)	3 (42.0)	-
8-10 years	14 (35.0)	3 (35.4)	-	-	54 (41.4)	6 (48.6)	3 (49.2)	4 (54.3)
>10 years	1 (35.0)	-	-	-	94 (41.2)	15 (46.1)	4 (43.4)	8 (41.0)
Date of seroconversion								
After 1996	-	-	-	-	67 (44.8)	-	-	1 (43.1)
1994-95	16 (42.5)	-	-	-	22 (39.8)	1 (56.6)	1 (60.2)	1 (67.5)
1992-93	26 (37.9)	-	1 (58.6)	-	36 (37.6)	4 (51.0)	-	3 (50.7)
1990-91	44 (39.9)	2 (43.4)	1 (62.1)	-	50 (41.8)	11 (44.3)	5 (58.8)	1 (40.7)
1988-89	48 (38.9)	11 (44.6)	1 (37.3)	-	45 (41.5)	11 (43.0)	3 (42.0)	-
1986-87	82 (35.8)	24 (46.6)	6 (46.7)	-	57 (41.0)	6 (48.6)	4 (44.7)	4 (54.3)
1984-85	152 (35.0)	68 (42.0)	7 (50.6)	2 (40.2)	78 (42.1)	15 (43.1)	3 (50.2)	7 (41.4)

AIDS= acquired immune deficiency syndrome; HAART = highly active antiretroviral therapy; HIV= human immunodeficiency virus; MACS = Multicenter AIDS Cohort Study; WIHS = Women's Interagency HIV Study.

^a Baseline defined as earliest study visit after age 35 within the calendar period with specified HIV status.

Note: only 19 WIHS women in the study population had known dates of seroconversion.

Web Table 7. Characteristics of MACS Participants in the HAART Era With Known Date of Seroconversion, Stratified by Date of Seroconversion

	MACS, 1996-2008 (HAART era)			
	Seroconversion < 1992		Seroconversion >= 1992	
	n	%	n	%
Individuals	230		125	
Person-years (p-y)	2,047		891	
p-y before HAART initiation	626	31	265	30
p-y after HAART initiation	1,421	69	625	70
Alive at exit of analysis	160	70	114	91
AIDS deaths	43	19	5	4
Non-AIDS deaths	15	7	1	1
Deaths of unknown cause	12	5	5	4
All-cause death per 100,000 p-y	3,420		1,235	
White, non-Hispanic	196	85	103	82
High school education ^a	226	100	116	94
College education ^a	123	54	70	57
Employed ^a	174	76	100	80
Smoking history ^a	164	71	85	68
14+ alcoholic drinks/week ^a	19	8	12	10
Injection drug use history ^a	26	11	13	10
Any drug use history ^a	214	93	111	89
Depressive symptoms ^a	61	27	39	31
HBV at study entry	11	5	4	3
HCV at study entry	0	0	1	1
HBV or HCV at study entry	11	5	5	4
Median (IQR) age at enrollment	30.6 (27.2, 35.4)		31.3 (26.3, 37.8)	
Median (IQR) age at baseline ^a	41.6 (37.8, 46.3)		42.4 (36.3, 47.5)	

HAART= Highly active antiretroviral therapy; HBV = hepatitis B virus; HCV = hepatitis C virus; HIV= human immunodeficiency virus; IQR= interquartile range; MACS= Multicenter AIDS Cohort Study; WIHS = Women's Interagency HIV Study.

^a Values at baseline, defined as earliest study visit after age 35 within the calendar period with specified HIV status.

Note: only 19 WIHS women in the study population had known dates of seroconversion.