

Table 4: Risk factors for Cataract (or Prior Cataract Surgery) at the Time of Cohort Entry in Eyes without an Opportunistic Ocular Infection during follow-up in the Longitudinal Study of Ocular Complications of AIDS

Characteristics	No Cataract	Cataract	Unadjusted Odds Ratio (95% Confidence Interval)	Unadjusted P-value	Adjusted Odds Ratio (95% Confidence Interval)	Adjusted P-value
Demographic characteristics						
Age (per 10 years)	NA	NA	2.83 (1.88, 4.25)	< 0.0001	2.61 (1.68, 4.05)	< 0.0001
Gender						
Female	623 (98%)	11 (2%)	1.00		1.00	
Male	2552 (99%)	26 (1%)	0.58 (0.24, 1.37)	0.2104	0.52 (0.19, 1.41)	0.1939
Race/Ethnicity						
Not black	2040 (99%)	18 (1%)	1.00		1.00	
Black	1135 (98%)	19 (2%)	1.9 (0.88, 4.06)	0.0982	2.97 (1.41, 6.22)	0.0039
Education						
High school or less	1291 (99%)	13 (1%)	1.00		1.00	
Some college	967 (99%)	13 (1%)	1.34 (0.53, 3.31)	0.5327	1.18 (0.46, 3.01)	0.7330
College graduate	909 (99%)	11 (1%)	1.2 (0.48, 2.98)	0.6910	0.77 (0.29, 1.96)	0.5777
Missing	8 (100%)					
Associated morbidities						
Karnofsky score						
90-100	1639 (99%)	13 (1%)	1.00		1.00	
≤ 80	1534 (98%)	24 (2%)	1.97 (0.89, 4.33)	0.0900	1.79 (0.8, 3.99)	0.1546
Missing	2 (100%)					
Anemia						
No	2179 (99%)	29 (1%)	1.00		1.00	
Yes	976 (99%)	8 (1%)	0.62 (0.23, 1.6)	0.3176	0.78 (0.24, 2.47)	0.6779
Missing	20 (100%)					

Diabetes							
No	2897 (99%)	27 (1%)	1.00			1.00	
Yes	278 (97%)	10 (3%)	3.86 (1.56, 9.53)	0.0034		2.92 (0.96, 8.85)	0.0582
Hypertension							
No	2543 (99%)	21 (1%)	1.00			1.00	
Yes	630 (98%)	16 (2%)	3.08 (1.41, 6.69)	0.0045		1.92 (0.86, 4.25)	0.1086
Missing	2 (100%)						
Hyperlipidemia							
No	2482 (99%)	30 (1%)	1.00			1.00	
Yes	685 (99%)	7 (1%)	0.85 (0.32, 2.18)	0.7271		0.39 (0.14, 1.05)	0.0603
Missing	8 (100%)						
Human Immunodeficiency Virus (HIV)/Acquired Immune Deficiency Syndrome (AIDS) History							
Time since AIDS diagnosis (years)							
< 2 years	906 (99%)	10 (1%)	1.00			1.00	
2-4 years	593 (99%)	5 (1%)	0.76 (0.2, 2.82)	0.6856		0.53 (0.13, 2.11)	0.3668
4-6 years	570 (99%)	8 (1%)	1.27 (0.42, 3.85)	0.6703		1.08 (0.32, 3.62)	0.8974
≥6 years	1058 (99%)	14 (1%)	1.2 (0.44, 3.22)	0.7188		0.79 (0.25, 2.45)	0.6788
Missing	48 (100%)						
CD4+ T cells, N(%)							
≥ 50 cells/uL	2580 (99%)	32 (1%)	1.00			1.00	
< 50 cells/uL	563 (99%)	3 (1%)	0.43 (0.12, 1.44)	0.1686		0.80 (0.28, 2.03)	0.6807
Missing	32 (94%)	2 (6%)					
Nadir CD4+ T cells (cells/uL)							
≥50 cells/uL	1465 (99%)	19 (1%)	1.00			1.00	
< 50 cells/uL	1661 (99%)	17 (1%)	0.79 (0.36, 1.71)	0.5480		1.01 (0.45, 2.22)	0.9848
Missing	49 (98%)	1 (2%)					
HIV viral load [Log10(copies/mL)]							
< 2.6 (undetectable)	1329 (98%)	25 (2%)	1.00			1.00	
2.6 or higher	1686 (99%)	10 (1%)	0.32 (0.13, 0.72)	0.0061		0.32 (0.12, 0.80)	0.0141
Missing	160 (99%)	2 (1%)					

Highly active antiretroviral therapy							
No	515 (99%)	7 (1%)	1.00			1.00	
Yes	2658 (99%)	30 (1%)	0.83 (0.29, 2.31)	0.7212		0.43 (0.12, 1.41)	0.1605
Missing	2 (100%)						
Co-infections							
Hepatitis B							
No	2947 (99%)	29 (1%)	1.00			1.00	
Yes	226 (97%)	8 (3%)	3.6 (1.38, 9.37)	0.0088		1.63 (0.62, 4.27)	0.3199
Missing	2 (100%)						
Hepatitis C							
No	2939 (99%)	35 (1%)	1.00			1.00	
Yes	234 (99%)	2 (1%)	0.72 (0.16, 3.04)	0.6518		0.60 (0.14, 2.54)	0.4846
Missing	2 (100%)						
Ocular characteristics							
Anterior inflammation*							
No	3088 (99%)	33 (1%)	1.00			1.00	
Yes	87 (96%)	4 (4%)	5.99 (2.1, 17.03)	0.0008		5.31 (1.54, 18.24)	0.0079
Vitreous inflammation**							
No	3116 (99%)	35 (1%)	1.00			1.00	
Yes	59 (97%)	2 (3%)	2.13 (0.63, 7.08)	0.2183		0.10 (0.03, 0.32)	0.0001
History of retinal detachment***							
No	3158 (99%)	30 (1%)	1.00			1.00	
Yes	17 (71%)	7 (29%)	28.08 (6.89, 1114.29)	< 0.0001		48.66 (13.81, 171.40)	< 0.0001

* Anterior chamber cells or flare, diagnosis with anterior uveitis or keratitis, presence of posterior synechiae, or a combination thereof.

** Vitreous haze, anterior vitreous cells, intermediate uveitis, endophthalmitis.

*** Retinal detachment includes individuals with a documented history of retinal detachment and/or the presence of silicone oil.

Table 5: Assessment of Risk Factors for Incident Cataract in Eyes without an Opportunistic Ocular Infection (participants in the Longitudinal Study of Ocular Complications of AIDS), Final Cox Regression Model.

Characteristics*	Rate per 100 Eye-years	Count of Cataracts per Eye-year at Risk	Unadjusted Hazard Ratio (95% Confidence Interval [CI])	Unadjusted P-value	Adjusted Hazard Ratio (95% CI)	Adjusted P-value
Human Immunodeficiency Virus (HIV)/Acquired Immune Deficiency Syndrome (AIDS) History						
CD4+ T cells (time-varying)						
≥50 cells/uL	0.43	(50 / 11633)	1.00		1.00	
< 50 cells/uL	0.55	(6 / 1091.3)	2.16 (0.88, 5.25)	0.090	1.64 (0.77, 3.45)	0.19
	0	(0 / 135.7)				
Nadir CD4+ T cells (at enrollment)						
≥50 cells/uL	0.64	(39 / 6132.4)	1.00		1.00	
< 50 cells/uL	0.26	(17 / 6458.2)	0.62 (0.33, 1.16)	0.13	0.55 (0.31, 0.95)	0.031
	0	(0 / 111.6)				
HIV viral load (time-varying)						
< 2.6 (undetectable)	0.45	(35 / 7764.9)	1.00		1.00	
2.6 or higher	0.43	(21 / 4849.8)	1.58 (0.9, 2.76)	0.11	1.51 (0.86, 2.64)	0.1485
Highly active antiretroviral therapy (time-varying)						
No	0.81	(8 / 982.8)	1.00		1.00	
Yes	0.41	(48 / 11743.6)	0.5 (0.22, 1.1)	0.082	0.54 (0.26, 1.11)	0.093
Ocular Characteristics						
History of cataract in contralateral eye						
No	0.27	34 / 12570.3	1.00		1.00	
Yes	14.1	22 / 156	21.16 (10.05, 44.53)	< 0.0001	21.58 (10.39, 44.81)	< 0.0001

Anterior inflammation (time-varying) [†]						
No	0.4	50 / 12570.3	1.00		1.00	
Yes	3.85	6 / 156	6 (1.67, 21.52)	0.0060	4.40 (1.64, 11.78)	0.0032
Vitreous inflammation (time-varying) [‡]						
No	0.41	52 / 12661.8	1.00		1.00	
Yes	6.2	4 / 64.5	11.31 (3.6, 35.52)	< 0.0001	7.12 (2.02, 25.02)	0.0022
History of retinal detachment [§]						
No	0.39	48 / 12387.4	1.00		1.00	
Yes	2.36	8 / 338.9	5.30 (2.51, 11.16)	< 0.0001	4.94 (2.21, 11.02)	< 0.0001

* Additional variables that were not associated with increased incidence of cataract included: gender, race, education, anemia (time-varying), diabetes, hypertension, hyperlipidemia, current CD4+ T-cells, current human immunodeficiency virus load, current use of highly active antiretroviral therapy, and hepatitis C. Nadir CD4+ T-cell count had no crude association with incident cataract, but was associated with incident cataract after adjustment for the factors above. Several variables were associated significantly with incident cataract in the crude analysis, but were omitted from the adjusted analysis because they were confounded by 1 or more of the variables in the final model and were not associated with incident cataract after adjustment. These include: Karnofsky score and hepatitis B.

[†] Anterior chamber cells or flare, diagnosis with anterior uveitis or keratitis, presence of posterior synechiae, or a combination thereof.

[‡] Vitreous haze, anterior vitreous cells, intermediate uveitis, endophthalmitis.

[§] Retinal detachment includes individuals with a documented history of retinal detachment and/or the presence of silicone oil.