

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.

Table 6: Assessment of Risk Factors for Incident Cataract in Eyes without an Opportunistic Ocular Infection (participants in the Longitudinal Study of Ocular Complications of AIDS)

Characteristics*	Rate per 100 Eye-years	Count of Cataracts per Eye-years at Risk	Ratio (95% Confi-)	Unadjusted P-value	Adjusted Hazard Ratio (95% CI)	Adjusted P-value
Demographic characteristics						
Gender						
Female	0.49	(12 / 2438.4)	1.00		1.00	
Male	0.43	(44 / 10288)	0.86 (0.45, 1.65)	0.6538	0.98 (0.5, 1.92)	0.9535
Race/Ethnicity						
Not black	0.44	(37 / 8366)	1.00		1.00	
Black	0.44	(19 / 4360.3)	1.43 (0.78, 2.61)	0.2468	1.20 (0.71, 2.05)	0.4898
	4.15	(1 / 24.1)				
Education (at enrollment)						
High school or less	0.45	(21 / 4646.8)	1.00		1.00	
Some college	0.25	(10 / 3926.3)	0.54 (0.25, 1.14)	0.1025	0.72 (0.34, 1.52)	0.3891
College graduate	0.58	(24 / 4129.1)	0.82 (0.43, 1.53)	0.5269	1.03 (0.57, 1.84)	0.9300
Associated morbidities						
Karnofsky score (at enrollment)						
90-100	0.36	(26 / 7285.9)	1.00		1.00	
≤80	0.55	(30 / 5440.4)	1.73 (1.01, 2.96)	0.0457	1.43 (0.85, 2.39)	0.1740
	0	(0 / 3.8)				
Anemia (time-varying)						
No	0.43	(37 / 8645.3)	1.00		1.00	
Yes	0.47	(19 / 4077.3)	1.37 (0.77, 2.42)	0.2819	1.35 (0.82, 2.21)	0.2378

Diabetes (at enrollment)						
No	0.44	(51 / 11664.1)	1.00		1.00	
Yes	0.47	(5 / 1062.2)	0.89 (0.35, 2.21)	0.7940	0.91 (0.35, 2.35)	0.8484
Hypertension (at enrollment)						
No	0.37	(39 / 10408.6)	1.00		1.00	
Yes	0.73	(17 / 2317.7)	1.36 (0.77, 2.39)	0.2815	1.41 (0.77, 2.57)	0.2604
	0	(0 / 10.3)				
Hyperlipidemia (at enrollment)						
No	0.41	(40 / 9757.9)	1.00		1.00	
Yes	0.54	(16 / 2958.1)	1.12 (0.61, 2.04)	0.7202	1.16 (0.6, 2.22)	0.6494
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)	0.0896	1.64 (0.77, 3.45)	0.1925
	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)	0.1312	0.55 (0.31, 0.95)	0.0307
	0	(0 / 111.6)				
HIV viral load (time-varying)						
[Log10(copies/mL)]						
< 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)	0.1050	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)	0.0819	0.54 (0.26, 1.11)	0.0930

Co-infections

Hepatitis B (at enrollment)						
No	0.42	(51 / 12206.9)	1.00		1.00	
Yes	0.97	(5 / 516.3)	2.7 (1.04, 7.01)	0.0406	2.36 (0.93, 5.98)	0.0705
	0	(0 / 3.1)				

Hepatitis C (at enrollment)						
No	0.45	(55 / 12171.1)	1.00		1.00	
Yes	0.18	(1 / 552.1)	0.45 (0.06, 3.28)	0.4306	0.56 (0.08, 3.95)	0.5640

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

† 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.