

**Table 1:** Characteristics of individuals and eyes at enrollment for individuals in the Longitudinal Study of Ocular Complications of AIDS without cytomegalovirus retinitis.

<u>Characteristics of patients at enrollment</u>	<b>Participants (N = 1606)</b>	
<b>Demographic characteristics</b>		
Age at enrollment, years		
Median (interquartile range)	43	(38 , 49)
Gender		
Female	317	(20%)
Male	1289	(80%)
Race/Ethnicity		
White	739	(46%)
Black	577	(36%)
Hispanic	236	(15%)
Other	54	(3%)
Education		
High school or less	652	(41%)
Some college	490	(31%)
College graduate	460	(29%)
Missing, N(%)	4	(0%)
<b>Associated morbidities</b>		
Karnofsky score		
90-100	826	(52%)
≤ 80	779	(49%)
Missing, N(%)	1	(0%)
Anemia		
No	1104	(69%)
Yes	492	(31%)
Missing, N(%)	10	(1%)
Diabetes		
No	1462	(91%)
Yes	144	(9%)
Hypertension		
No	1282	(80%)
Yes	323	(20%)
Missing, N(%)	1	(0%)

Hyperlipidemia		
No	1256	(78%)
Yes	346	(22%)
Missing, N(%)	4	(0%)

#### **Human Immunodeficiency Virus (HIV)/Acquired Immune Deficiency Syndrome (AIDS) History**

Years since AIDS diagnosis (years)		
Median (interquartile range)	4.2	(1.6 , 7.1)

Absolute CD4+ T cell count, cells/ $\mu$ L		
Median (interquartile range)	189	(78 , 338)
<i>Cells/uL, N(%)</i>		
$\geq$ 50 cells/uL	1306	(82%)
< 50 cells/uL	283	(18%)
Missing, N(%)	17	(1%)

Nadir CD4+ T cells (cells/uL)		
$\geq$ 50 cells/uL	742	(47%)
< 50 cells/uL	839	(53%)
Missing, N(%)	25	(2%)

(HIV) viral load, log <sub>10</sub> (copies/mL)		
Median (interquartile range)		2.9 (2.0, 4.7)
<i>Log<sub>10</sub>(copies/mL)</i>		
< 2.6 (undetectable)	677	(44%)
2.6 or higher	848	(56%)
Missing, N(%)	81	(5%)

Highly active antiretroviral therapy		
No	261	(16%)
Yes	1344	(84%)
Missing, N(%)	1	(0%)

#### **Co-infections**

Cerebral toxoplasmosis		
No	1593	(99%)
Yes	13	(1%)

Hepatitis B		
No	1488	(93%)
Yes	117	(7%)
Missing, N(%)	1	(0%)

Hepatitis C		
No	1487	(93%)
Yes	118	(7%)
Missing, N(%)	1	(0%)

<b>Ocular characteristics</b>	<b>Eyes (E = 3212)</b>	
Anterior inflammation*		
No	3121	(97%)
Yes	91	(3%)
Vitreous inflammation†		
No	3151	(98%)
Yes	61	(2%)
History of retinal detachment‡		
No	3188	(99%)
Yes	24	(1%)

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\* 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 2: Comparison of the prevalence of at least one eye with a cataract in individuals from the ProyectoVER, LSOCA (patients without CMV retinitis or other ocular opportunistic infections), and LALES cohorts.\*

Age category	<u>Proyecto VER Cohort</u>			<u>LSOCA Cohort</u> No CMV Retinitis			<u>LALES Cohort</u>		
	N	%	(95% CI)	N	%	(95% CI)	N	%	(95% CI)
< 40	0	n/a		518	0.6%	(0.1% - 1.7%)	0	n/a	
40-49	1594	0.3%	(0.06% - 6.5%)	736	1.6%**	(0.8% - 2.9%)	2364	0.9%	(0.6% - 1.4%)
50-59	1362	2.0%	(1.3% - 28.8%)	313	2.2%	(0.9% - 4.6%)	1853	1.8%	(1.3%-2.6%)
60-69	984	8.6%	(6.9% - 10.6%)	63	9.5%	(3.5% - 19.6%)	1195	7.3%	(5.9% - 8.9%)
70-79	636	23.3%	(20.0% - 26.8%)	10	20.0%	(2.5% - 55.7%)	584	24.1%	(20.7% - 27.8%)
80+	196	58.2%	(50.9% - 65.2%)	0	n/a		146	52.1%	(43.6% - 60.4%)

\*N = number of individuals; % = percent; 95% CI = exact binomial 95% confidence interval

LSOCA = Longitudinal study of the ocular complications of AIDS; CMV = cytomegalovirus; LALES = Los Angeles Latino Eye Study; Proyecto VER data derive from reference 28, and LALES data from reference 29.

\*\*The prevalence of 1.6% in the LSOCA Cohort 40-49 year-old age category was statistically significantly different than the same age group in the Proyecto VER Cohort (age-group/study cohort interaction p=0.042). No other statistically significant age-group/study cohort interactions were observed.

Table 3: 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 Studies of the Complications of AIDS, Final Logistic Regression Model

Characteristics*	No Cataract	Cataract	Unadjusted Odds Ratio (95% Confidence Interval)	Unadjusted P-value	Adjusted Odds Ratio (95% Confidence Interval)	Adjusted P-value
Age (per 10 years)	NA	NA	2.83 (1.88, 4.25)	< 0.0001	2.61 (1.68, 4.05)	< 0.0001
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
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
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

HIV = human immunodeficiency virus; NA = not applicable (age is a numerical variable).

\* The following characteristics were evaluated but not included in the final logistic regression model (summarized in Table 4, available at: <http://aaajournal.org>) since they were not significantly associated with cataract at the time of cohort entry: gender, race/ethnicity, education, Karnofsky score, anemia, hyperlipidemia, time since AIDS diagnosis, current CD4+ T-cell count, nadir CD4+ T-cell count, current use of highly active antiretroviral therapy, and hepatitis C. African American race and vitreous inflammation had no crude association with cataract at the time of cohort entry, but were associated after adjustment for the factors above. Hepatitis B, diabetes, and hypertension were associated with increased risk of prevalent cataract that was attributable to confounding by the variables included in the final multiple logistic regression model above.

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

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