

**S3 Table. Early median CD4 cell counts in infected adults from several large population studies\*.** The sources of the studies, the periods of study, measurement times, and other details are mentioned. The USA and European studies report IQRs, whereas the CASCADE study provides 95% CIs. NA - not available.

Region (Reference)	Time period	Measurement time	Risk group	CD4 counts ( <i>cells/μL</i> )	Sample size ( <i>n</i> )	Other details
USA <sup>‡</sup> [1]	2006 – 15	Within 6 m.o. diagnosis	MSM	387 (227 – 555)	17,779	
			HET	308 (125 – 508)	8,310	
Europe [2]	2002 – 07	Within 6 m.o. diagnosis	MSM	435 (259 – 585)	2,084	$P < 10^{-3}$
			HET	280 (110 – 458)	1,501	
England & Wales [3]	1990 – 98	Within 6 m.o. diagnosis	MSM	331 (NA)**	6,213	$P < 10^{-3}$
			HET	230 (NA)**	2,637	
Europe & Australia SCs <sup>††</sup> [4]	1979 – 00	Seroconversion	MSM (age<40)	621 (609 – 634)	2,941	$n = 5739^{††}$ . 54.7% of $n$ (MSM & hemophiliac men) only men. 20.4% of $n$ women. 12.6% of $n$ aged>40.
			MSM (age>40)	578 (556 – 601)	889	
			HET men (age<40)	576 (545 – 607)		
			HET men (age>40)	534 (501 – 569)		
			HET women (age<40)	623 (599 – 647)		
			HET women (age>40)	580 (548 – 612)		

\*When many studies were available with overlapping durations and geographical locations, we chose data from the study with the larger sample size, (as in the case of New York city [1]).

<sup>‡</sup>The proportion of females was 22.2% and the age group 13-29 had 35.6% of  $n = 28,162$  individuals.

\*\*We chose the SDs from the Europe (2002-07) study (see Methods).

<sup>††</sup>We used the SDs corresponding to age < 40 years. For HET, we used the largest SD among HET men and women.

<sup>‡‡</sup> $n$  includes MSM, HET, injection drug users, and hemophiliac men.

## References

- Robertson, M. M., Braunstein, S. L., Hoover, D. R., Li, S. & Nash, D. Estimates of the time from seroconversion to ART initiation among people newly diagnosed with HIV from 2006 to 2015, New York City. *Clin. Infect. Dis.* **71**, e308–e315 (2019). URL <https://doi.org/10.1093/cid/ciz1178>.
- Frentz, D. *et al.* Patterns of transmitted HIV drug resistance in Europe vary by risk group. *PLoS ONE* **9**, e94495 (2014). URL <https://doi.org/10.1371/journal.pone.0094495>.
- Gupta, S. B., Gilbert, R. L., Brady, A. R., Livingstone, S. J. & Evans, B. G. CD4 cell counts in adults with newly diagnosed HIV infection: results of surveillance in England and Wales, 1990-1998. *AIDS* **14**, 853–861 (2000). URL [https://journals.lww.com/aidsonline/Fulltext/2000/05050/CD4\\_cell\\_counts\\_in\\_adults\\_with\\_newly\\_diagnosed\\_HIV.12.aspx](https://journals.lww.com/aidsonline/Fulltext/2000/05050/CD4_cell_counts_in_adults_with_newly_diagnosed_HIV.12.aspx).
- CASCADE Collaboration. Differences in CD4 cell counts at seroconversion and decline among 5739 HIV-1-infected individuals with well-estimated dates of seroconversion. *J. Acquir. Immune Defic. Syndr.* **34**, 76–83 (2003). URL [https://journals.lww.com/jaids/Fulltext/2003/09010/Differences\\_in\\_CD4\\_Cell\\_Counts\\_at\\_Seroconversion.12.aspx](https://journals.lww.com/jaids/Fulltext/2003/09010/Differences_in_CD4_Cell_Counts_at_Seroconversion.12.aspx).