

Table 2.1. Cohort studies of HIV and Kaposi sarcoma

Reference, location.	Cohort description	Detection method	No. of cases	Relative risk (95% CI)	Adjustment for potential confounders	Comments
Goedert et al. (1998), USA	98 336 people registered with AIDS, 7 regions	Data linkage with cancer registry data	7028	310 (not available)	SIR adjusted for age and sex	From AIDS diagnosis to 27 months post AIDS
Grulich (1999), Australia	People registered with AIDS, NSW, 1984–1995	Data linkage with cancer registry data.	511	72 700	SIR adjusted for age and sex	Pre-HAART only. From 5 years before AIDS to death.
Petruckevitch et al., (1999), USA	2048 people attending 11 HIV clinics in London, 1982–1995	Clinic records	98	3267 (2652–3981)	Age and sex	No cases of KS observed in women
Frisch et al., (2001), USA.	People registered with AIDS, 1980–1996, 11 regions	Data linkage with cancer registry data.	5936	178 (173–182)	SIR adjusted for age and sex	From 4 to 27 months after AIDS.
Allardice et al., (2003), Scotland	People registered with HIV or AIDS, 1981–1996, national.	Data linkage with cancer registry data	55	2750 (2067–3583)	SIR adjusted for age and sex	Pre-HAART era; from HIV diagnosis to end 1996.
Dal Maso et al. (2003), Italy.	People registered with AIDS, 1985–1998, 19 regions.	Data linkage with cancer registry data.	525	1749 (1602–1905)	SIR adjusted for age and sex	From 6 months before AIDS to 3.5 years after
Franceschi et al., (2003), Italy	People registered with AIDS, 1985–1998, 19 regions	Data linkage with cancer registry data.	473	497 (412–595)	SIR adjusted for age and sex	Decline in KS incidence rates from 1986 thru 1998
Mbulaiteye et al., (2003), USA	82 217 adults with AIDS and a CD4+ cell count at AIDS onset	Data linkage with cancer registry data in 11 US regions	1937	258	Age, race and sex	SIR increased with declining number of CD4 count, with a drop for 100 CD4 of 1.4
Biggar et al., (2004), US	8828 people aged 60+ registered with AIDS 1981–1996, USA	Data linkage with cancer registry data	220 in homosexual men; 5 in women	836 (610–1119); 880 (106–3174) in women	SIR adjusted for age, sex and race	From AIDS onset to 27 months post AIDS
Hessol et al., (2004), USA	1554 HIV-positive women and 391 HIV-negative women	Matching with cancer registry and/or clinical diagnoses of cancer, compared to SEER rates	6	214 (78–415)	Age, race and sex	No Ks in HIV-negative women; SIR for KS in HIV-positive dropped from 316 in 1994–1996 to 189n in 1997–2001

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Clifford et al., (2005), Switzerland	7304 people with an HIV or AIDS diagnosis, 7 hospitals 1985–2002.	Data linkage with cancer registry data	272	192 (170–217)	SIR adjusted for age and sex	3 months after study entry to 1996–2002. Highest SIR in women (502) than men (188), in those not under HAART (239) than in HAART (24.2); and in those with lowest CD4 at entry (SIR 571 for CD4<100; 76.5 for CD4 > 500).
Newnham et al., (2005), England.	33 190 people registered with HIV, 1985–2001, Thames region.	Data linkage with cancer registry data	872 in men; 59 in women	237 (221–253) in men; 774 (589–999) in women	SIR adjusted for age and sex	From HIV diagnosis to end 2001.
Serraino et al., (2005), Italy and France	6072 HIV-positive persons from France and 2002 HIV-eroconverters from Italy	Clinical records	317	451 (403–504)	SIR adjusted for country, age, and sex	KS incidence rates were higher in men than in women, and in homosexual men than in IDU
Engels et al., (2006), USA.	375 933 adults registered with AIDS, 1980–2002, 11 regions	Data linkage with cancer registry data	5131	52 990, in 1980–1989; 22 100, in 1990–1995; 3640, in 1996–2002	SIR adjusted for age, sex, race, year, and region.	From 4 to 27 months post AIDS Statistically significant declining SIRs from 1990 to 2002, but it remains stable thereafter in the HAART era.
Mbulaiteye et al., (2006), Uganda.	12 607 People registered with TASO, 1988–2002.	Data linkage with cancer registry data	105	6.4 (4.8–8.4)	SIR adjusted for age and sex and year	From 4 to 60 months after registration with TASO. Likely to be some overlap with Newton 2001
Galceran et al., (2007), Spain	1659 adults registered with AIDS, 1981–1999	Data linkage with cancer registry data	71 in men; 6 in women	486 (380–614) in men; 1030 (371–2257) in women	SIR adjusted for age and sex and province	From 60 months before to 60 months after AIDS. SIRs were similar till 1996 (490), and in 1997–1999 (459)

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Grulich et al., (2007a), 6 countries	444 172 people with HIV or AIDS, 1980–2002	Data linkage with cancer registry data	494	3640 (3326–3976)	Meta-SIR, adjusted for age and sex	Meta-analysis.
Serraino et al., (2007) Italy	8074 people with HIV in France (DMI-2; 6072) and Italy (ISS; 2002 seroconverters)	Cancer diagnoses during follow up.	317	451 (403–504)	Age and sex	SIR was lower in those who had used HAART (120, 72–187) compared to nonusers (548, 487–614).
Engels et al., (2008), USA	57 350 people registered with HIV, 1991–2005.	Data linkage with cancer registry data (Colorado, Florida, NJ)	173	1300 (1100–1500)	SIR adjusted for sex, age, year, region.	4–60 months after HIV registration SIR declined post 1995 (RR 0.4), but SIR still raised (790). Incidence higher in those with lower CD4 at HIV.
Long et al., (2008), USA	2566 patients with HIV in Baltimore (Johns Hopkins cohort), 1996–2005.	Matching with cancer registry.	68	5600 (4400–7200)	SIR adjusted for age, race, sex, and year.	Incidence fell from >5/1000 py in 1996 to 1/1000 py in 2005 (p = 0.012)
Patel et al., (2008), USA	54 780 people with HIV in the US (HOPS/ASD study)	Clinical diagnosis of cancer, compared to SEER rates	1904	197 (185–210) in 1992–1995; 112 (95–133), 2000–2003	Directly standardised RR, adjusted for age, race and sex	From HIV diagnosis to death or end of study (2003). Significant decline over time.
Guech-Ongey et al., (2008), USA	491 048 adults with HIV/AIDS	Data linkage with cancer registry data	17 primary ocular KS	109 (63.5–175)	Age, sex, year	Incidence higher in regions with high UVR.
Franceschi et al., (2008), Switzerland	12 959 people with HIV/AIDS, followed from 1984 to 2006	Data linkage with cancer registry data	597	0.11 (0.08–0.14), HAART users vs non users	SIR adjusted for centre, age, sex, and HIV transmission category	In HAART users, high SIR associated with treatment interruption (8.14) and with a CD4 count <50 at enrollment

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Dal Maso et al., (2009), Italy	22 065 people with AIDS	Data linkage with cancer registry data	59	572 (508–641) in 1997–2004	SIR adjusted for age and sex	SIR was highest in young adults (<35 years)