

**Table 2.4. Cohort studies of HIV and non-Hodgkin lymphoma**

Reference, location.	Cohort description	Detection method	No. of cases	Relative risk (95% CI)	Adjustment for potential confounders	Comments
Cote et al., (1996), USA	50 989 people registered with AIDS, 1981–1990, 4 regions	Data linkage with cancer registry data	431 primary brain	3600	SIR adjusted for age and sex	From AIDS diagnosis to 3.5 years after AIDS diagnosis.
Goedert et al., (1998), USA	98 336 people registered with AIDS, 7 regions	Data linkage with cancer registry data	1793	113	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.	205	97.3	SIR adjusted for age and sex	From 5 years before AIDS to death.
Dal Maso et al., (2001), Italy	3,134 adults aged 15–49 registered with AIDS, 1985–1996, 13 regions	Data linkage with cancer registry data	136	302 overall	SIR adjusted for age and sex	From 1 year prior to 3.5 years after AIDS diagnosis
Frisch et al., (2001), USA.	People registered with AIDS, 1980–1996, 11 regions	Data linkage with cancer registry data.	3344	72.8 (70.4–75.3)	SIR adjusted for age and sex	From 4 to 27 months after AIDS.
Dal Maso et al., (2003), Italy.	People registered with AIDS, 1985–1998, 19 regions.	Data linkage with cancer registry data.	449	352 (320–386)	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.	352	125 (105–149)	SIR adjusted for age and sex	Decline in NHL incidence after 1997
Allardice et al., (2003), Scotland	People registered with HIV or AIDS, 1981–1996, national.	Data linkage with cancer registry data	82	108 (85.6–134.4)	SIR adjusted for age and sex	From HIV diagnosis to end 1996.
Biggar et al., (2004), US	8828 people aged 60+ registered with AIDS 1981–1996, USA	Data linkage with cancer registry data	258	24.6 (7.5–80.3)	SIR adjusted for age, sex and race	From 4-27 months post AIDS

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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	214	76.4 (66.5–87.4)	SIR adjusted for age and sex	3 months after study entry to 1996–2002. Incidence highest in those with lowest CD4 at entry (SIR 145 when CD4<100; 35.8 when CD4 > 500); and in HAART users compared to non-users (SIR 24 v 99). SIR 16 in those using HAART for more than 6 months.
Newnham et al., (2005), England.	33 190 people registered with HIV, 1985–2001, Thames region.	Data linkage with cancer registry data	646	42.6 (39.4–46.0)	SIR adjusted for age and sex	From HIV diagnosis to end 2001.
Waters et al., (2005), England	5832 HVI+ patients at C&W hospital, seen since 1996.	Clinical records	102	0.97 (0.44–2.12) for effect of HCV	?	Among HCV Ab+ persons
Engels et al., (2006), USA.	375 933 adults registered with AIDS, 1980–2002, 11 regions	Data linkage with cancer registry data	4527	1980–89: 79.8 (75.2–84.6) 1990–95: 53.2 (51.2–55.2) 1996–02: 22.6 (20.8–24.6)	SIR adjusted for age, sex, race, year, and region.	From 4 to 27 months post AIDS Declining SIRs (P < 0.0001) from 1990 onwards. No decline in BL (SIR was 57, 53, and 50). DLBL SIRs were 98, 64, 30. I-Blastic was 141, 95, 60. CNS 5000, 4850, 1020.
Mbulaiteye et al., (2006), Uganda.	12 607 People registered with TASO, 1988–2002.	Data linkage with cancer registry data	5	3.6 (1.2–8.4)	SIR adjusted for age and sex and year	From 4 to 60 months after registration with TASO
McGinnis et al., (2006), USA	US Male Veterans (14 018 HIV+, 28 036 HIV neg), HIV diagnosis 1997–2004, cancer 1990–2004.	Medical record extraction	88 (HIV+) and 64 (HIV-)	9.7 (6.99–13.5)	RR adjusted for age and race.	HCV status not associated with NHL risk.

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Galceran et al., (2007), Spain	1659 adults registered with AIDS, 1981–1999	Data linkage with cancer registry data	52	Male: 126.1 (94.2–165) Female: 192.8 (91.8–356)	SIR adjusted for age and sex and province	From 60 months before to 60 months after AIDS. SIR was 134 till 1996, 109 in 1997–1999.
Grulich et al., (2007a), 6 countries	444 172 people with HIV or AIDS, 1980–2002	Data linkage with cancer registry data	5295	76.7 (39.4–149)	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)	Cancer diagnoses during follow up.	201	62 (54–71)	Age and sex	SIR was lower in those who had used HAART (35 (24–50) compared to 72 (61–83).
Engels et al., (2008), USA	57 350 people registered with HIV, 1991–2005.	Data linkage with cancer registry data (Colorado, Florida, NJ)	203	7.3 (6.4–8.4)	SIR adjusted for sex, age, year, region.	4–60 months after HIV registration RR declined post 1996 (RR 0.7), but SIR still raised (6.5). 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.	55	23.1 (17.8–30.0)	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	675	1992–95: 79.4 (72.4–87.1) 1996–99: 40.3 (35.6–45.6) 2000–03: 17.0 (14.3–20.3)	Directly standardised RR, adjusted for age, race and sex	From HIV diagnosis to death or end of study (2003). Significantly declining incidence with time. HR for receipt of ARV therapy was 0.68 (p < 0.001); nadir CD4 of < 200 HR was 6.03