

**Table 2.23. Cohort studies of HIV and liver cancer**

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	Probabilistic linkage with cancer registry data	8	49.3, in the pre-AIDS period	SIR adjusted for age and sex	Mo cases diagnosed in the post-AIDS period
Grulich (1999), Australia	3616 people registered with AIDS, NSW, 1984–1995	Probabilistic linkage with cancer registry data.	1	8.4 (0.2–46.7)	SIR adjusted for age and sex	From 5 years before AIDS to death.
Serraino et al., (2000), Italy and France,	4038 HIV-positive men	Clinical follow-up	2	11.0 (1.0–40.3)	SIR adjusted for age and sex	Excess risk restricted to IDU (SIR=24.3, 2.3–89.3).
Frisch et al., (2001), USA.	People registered with AIDS, 1980–1996, 11 regions	Probabilistic linkage with cancer registry data.	87	7.7 (6.1–9.4)	SIR adjusted for age and sex	From 60 months before AIDS to 27 months after AIDS.
Grulich et al., (2002), Australia.	8351 people registered with HIV or AIDS, 1985–1999, national.	Probabilistic linkage with cancer registry data.	3	2.72 (0.56–7.94)	SIR adjusted for age and sex	From 5 years prior AIDS, or HIV, to death
Dal Maso et al., (2003), Italy.	People registered with AIDS, 1985–1998, 19 regions.	Probabilistic linkage with cancer registry data.	3	1.9 (0.4–5.6)	SIR adjusted for age and sex	From 6 months before AIDS to 3.5 years after
Allardice et al., (2003), Scotland	People registered with HIV or AIDS, 1981–1996, national.	Probabilistic linkage with cancer registry data	2	22.0 (2.7–80.2)	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	Probabilistic linkage with cancer registry data	8	3.9 (1.7–7.8)	SIR adjusted for age, sex and race	From 4–27 months post AIDS
Clifford et al., (2005), Switzerland	7304 people with an HIV or AIDS diagnosis, 7 hospitals 1985-2002.	Probabilistic linkage with cancer registry data	5	7.0 (2.2.16.5)	SIR adjusted for age and sex	3 months after study entry to 1996-2002. All cases diagnosed among IDU
Newnham et al., (2005), England.	33 190 people registered with HIV, 1985–2001, Thames region.	Probabilistic linkage with cancer registry data	13	5.6 (3.0–9.6)	SIR adjusted for age and sex	From HIV diagnosis to end 2001.
Engels et al., (2006), USA.	375 933 adults registered with AIDS, 1980–2002, 11 regions	Probabilistic linkage with cancer registry data	50	3.3 (2.0–5.1), 1996–2002	SIR adjusted for age, sex, race, year, and region.	From 4 to 27 months post AIDS No risk change over time

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Mbulaiteye et al., (2006), Uganda.	12 607 People registered with TASO, 1988–2002.	Probabilistic linkage with cancer registry data	3	2.1 (0.4–6.0)	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	28	0.96 (0.56–1.63)	RR adjusted for age, race, alcohol abuse and HCV infection.	HCV status strongly associated with liver cancer risk (RR=12.5).
Galceran et al., (2007), Spain	1659 adults registered with AIDS, 1981–1999	Probabilistic linkage with cancer registry data	2 (all men)	13.13 (1.24–48.30)	SIR adjusted for age and sex and province	From 60 months before to 60 months after AIDS.
Grulich et al., (2007a), 6 countries	444 172 people with HIV or AIDS, 1980–2002	Probabilistic linkage with cancer registry data	133	5.22 (3.32–8.20)	Meta-SIR, adjusted for age and sex	Meta-analysis.
Hessol et al., (2007), USA	14 210 adults with AIDS registered in 1990–2000 (San Francisco). Cancer 1985–2002.	Probabilistic linkage with cancer registry data	23	3.6 (2.3–5.4)	SIR adjusted for age, sex, race, and differential survival.	From 5 years pre-AIDS.
Serraino et al., (2007), Italy	8074 people with HIV in France (DMI-2; 6072) and Italy (ISS; 2002)	Cancer diagnoses during follow up.	11	9.4 (4.7–16.9)	Age and sex	SIR was similar in HAART users and non users.
Engels et al., (2008), USA	57 350 people registered with HIV, 1991–2002	Probabilistic linkage with cancer registry data (Colorado, Florida, NJ)	14	2.7 (1.5–4.6)	SIR adjusted for sex, age, year, region.	4–60 months after HIV registration
Long et al., (2008), USA	2566 patients with HIV in Baltimore (Johns Hopkins cohort), 1996–2005.	Matching with cancer registry.	13	16.5 (8.8–28.2)	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	Not available	7.7 (5.7–10.1)	Directly standardised RR, adjusted for age, race and sex	From HIV diagnosis to death or end of study (2003).
Dal Maso et al., (2009), Italy	22 065 people with AIDS	Probabilistic linkage with cancer registry data	19	6.4 (3.7–10.5) in 1997–2004; 21.0 (0.4–6.4) in ≤1996	SIR adjusted for age, sex, area and period	SIR was highest in women (21.2), in young adults (<35 years) (26.2) and in IDU (24.3)