

HIV and Anal Cancer

Incidence of anal cancer in HIV+ patients

Group (n=number of ASCC cases)	Incidence rate per 100,000 Person-Years
Overall (n=1567)	50.7
MSM* (n=895)	89
Male other (n=176)	31.2
Female other (n=116)	20.5
Prior AIDS diagnosis (n=1381)	70
No prior AIDS diagnosis (n=186)	16.7

Anal cancer incidence is markedly elevated among people with HIV infection, especially in MSM* and people with AIDS

* Men who have sex with men

Immunosuppression and HIV viremia

- 21 Cohorts, n=102.777 HIV+ patients, n=492 Anal cancer cases
- Investigated associations between HIV viral load + CD4 nadir/peak and incidence of ASCC

CD4 nadir cells/ μ l*	HR (95% CI)
<50	13.4 (3.5 – 51)
50 to <100	8.1 (2.1 – 31.2)
100 to <200	6.2 (1.7 – 22.2)
200 to < 350	6.5 (2 - 20.9)
350 to <500	2.6 (0.7 – 9.4)
\geq 500	1.0 (reference)
Per 20% of time CD4 cells < 200 cells/ μ l [§]	1.17 (1.05 – 1.29)

**Anal cancer incidence rises with prolonged HIV-induced immunosuppression
CD4 count could be useful to improve screening strategies**

Outcome after RCT in HIV+ patients with anal cancer

Author	Patients (HIV+ vs. HIV-)	Clinical outcome
Oehler-Janne	40 vs. 80	Worse LC in HIV+
Seo	17 vs. 19	No differences
Hogg	21 vs. 66	Worse LC, increased acute tox in HIV+
Hammad	13 vs. 32	No differences
Munoz-Bongrand	20 vs. 26	Worse OS, split course RT
White	53 vs. 205	No differences
Grew	39 vs. 68	Worse LC and OS in HIV+
Wieghard	14 vs. 72	No differences
Martin	42 vs. 100	Worse CSS univariate, not significant on MVA
Leiker	43 vs. 54	No differences
Susko	52 vs. 59	Nonsignificant trend towards worse LC

Conclusion

Before introduction of combined antiretroviral therapy (CART):

- Omission of chemotherapy or reduced radiotherapy doses due to apprehended side effects
- Exclusion from randomized trials

After introduction of combined antiretroviral therapy (CART):

- HIV+: RCT tolerance and outcome comparable to HIV-negative patients in retrospective studies, albeit variability exists; close follow-up and liaison with infectiologist crucial
- ESMO-ESTRO and NCCN guidelines: standard RCT recommended in HIV+ patients
- HIV+ patients can be included in further trials, including immunotherapeutics

RADIANCE: patients receiving CART with HIV viral load <50 copies/mL and CD4>200/ μ L can be included in the trial !!