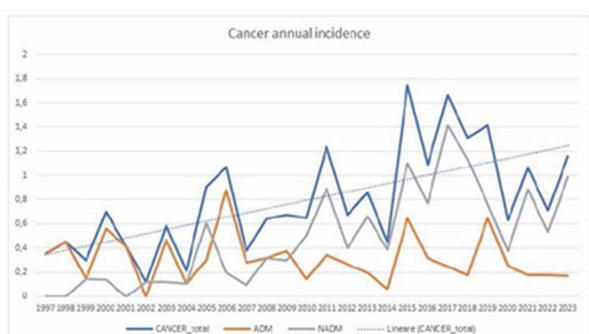


Abstract OC-62 Figure 2 Cancer simple case in three different periods



Abstract OC-62 Figure 3 Cancer annual incidence

survival. Our findings confirm the importance of cancer prevention and early detection in PLWH.

HIV associated comorbidities: pressing matters

OC-63 CNS RELAPSE RISK IN HIV-POSITIVE PATIENTS AFFECTED BY DLBCL AND HGBL – A RETROSPECTIVE STUDY OF THE MUSTHAL COHORT

¹G Rindone, ²M Rossi, ²F Sabbatini, ²P Columpsi, ³D Dalu, ³C Fasola, ⁴P Vitiello, ⁵C Viganò, ⁶E Suardi, ^{1,7}C Gambacorti Passerini, ^{2,7}P Bonfanti, ^{8,9}A Bandera, ¹L Verga. ¹Hematology department IRCCS San Gerardo dei Tintori, Monza, Italy; ²Infectious diseases department IRCCS San Gerardo dei Tintori, Monza, Italy; ³Oncology department ASST Fatebenefratelli Sacco, Milano, Italy; ⁴Hematology department Ospedale di Busto Arsizio, Busto Arsizio, Italy; ⁵Oncology department Ospedale Manzoni, Lecco, Italy; ⁶Infectious diseases department ASST Santi Paolo e Carlo, Milano, Italy; ⁷University of Milano-Bicocca, Milano, Italy; ⁸Infectious diseases department IRCCS Ca' Granda Policlinico di Milano, Milano, Italy; ⁹University of Milano, Milano, Italy

10.1136/sextrans-ICAR-2024.57

Background After cART introduction HIV+ patients (pts) with aggressive lymphoma are treated similarly to HIV- population. HIV+ pts are still considered at higher risk of central nervous system (CNS) relapse, but data from randomized and controlled studies on efficacy of CNS-directed prophylaxis are lacking.

Material and methods Data on clinical and virological features, treatment, and outcomes of 96 HIV+ pts affected by diffuse large B-cell lymphoma (DLBCL) or high-grade B-cell lymphoma (HGBL) from 1996 to 2023 in Northern Italy were recorded. Patients' disposition, overall survival (OS), progression-free survival (PFS), the impact of lymphoma-related, HIV-related features, first line treatments and CNS-directed prophylaxis on survival and relapse risk were evaluated, with focus on CNS relapses. A CNS relapse risk score (CNS-IPI) has been validated in HIV- pts. We tested whether this score was also valid in HIV+ pts.

Results 82 DLBCLs and 14 HGBLs were evaluated. Median age at lymphoma presentation was 49 years. 90% of pts had an advanced stage at diagnosis. CNS involvement was observed in 8 pts (8%) at diagnosis (table 1). Two thirds of pts were already on cART at the time of lymphoma diagnosis (table 2). Pts received CHOP-like regimens (74%), EPOCH (12%) and intensive chemotherapy (10%) in first line. 57 pts (61%) achieved complete response (CR). 23 pts progressed during chemotherapy and 10 pts relapsed after obtaining a first remission. 8 CNS relapses were recorded, mostly in high-risk for CNS-IPI population. A total of 46 pts is currently alive in CR (table 3). After a median follow-up of 43 months, 5-years OS is 57% and PFS is 59% in our cohort (figure 1). Pts who responded to first line treatment showed an OS of 78% at the last follow-up (figure 2). Only 4 deaths are due to infective complications during chemotherapy. A CD4+ count at lymphoma diagnosis > 200/microliter has a borderline association with a longer OS ($p = 0.072$). Multivariate analysis showed that PFS, but not OS, was significantly influenced by HIV viral load at its zenith, by CD4+ count at lymphoma diagnosis and by the presence of a cART at lymphoma diagnosis (table 4). Neither HIV and lymphoma related features, therapeutic regimens nor CNS directed prophylaxis seem to influence CNS relapse risk in our cohort.

Conclusions The CNS-IPI score appears to be effective also in HIV+ population affected by DLBCL and HGBL, which still display higher risk of CNS involvement at diagnosis and of CNS relapse than HIV- pts. HIV+ pts need to achieve a stable complete remission after first line therapy, which is associated with significantly higher and longer survival. The main cause of death in our cohort is progressive disease and not infective or therapy related complications also in the most immunodeficient group. CNS prophylaxis has been widely

Table 1. Clinical and pathological features at baseline (n=76)

Demographics	<ul style="list-style-type: none"> Male: 76 (100%) Age (mean ± SD): 73.7 ± 6.1 (range 58-87) Median age: 73.7 (IQR 68-79)
Pathological features	<ul style="list-style-type: none"> CD4 count (mean ± SD): 412 ± 120 (range 100-750) Median CD4 count: 412 (IQR 300-500) CD4 nadir (mean ± SD): 180 ± 80 (range 50-450) Median CD4 nadir: 180 (IQR 100-250) CD4 nadir < 50: 19 (25%) CD4 nadir < 100: 35 (46%) CD4 nadir < 200: 54 (71%) CD4 nadir < 350: 68 (90%) CD4 nadir < 500: 76 (100%)
Antiretroviral therapy (ART)	<ul style="list-style-type: none"> INSTI-based: 56 (74%) NNRTI-based: 10 (13%) PI-based: 10 (13%)
Comorbidities	<ul style="list-style-type: none"> MM: 56 (74%) PP: 29 (38%) Anticholinergic burden score (mean ± SD): 1.23 ± 1.15 (range 0-4) Median anticholinergic burden score: 1.23 (IQR 0-2)

Table 2. Biochemical features at baseline (n=76)

Glucose	<ul style="list-style-type: none"> Mean HbA1c: 5.8% (range 4.5-8.5) Median HbA1c: 5.8% (IQR 5.5-6.2) Mean fasting glucose: 100 mg/dL (range 70-150) Median fasting glucose: 100 mg/dL (IQR 90-110) Mean 2-hour glucose: 140 mg/dL (range 100-200) Median 2-hour glucose: 140 mg/dL (IQR 120-160)
Lipids	<ul style="list-style-type: none"> Mean LDL cholesterol: 160 mg/dL (range 100-250) Median LDL cholesterol: 160 mg/dL (IQR 130-190) Mean HDL cholesterol: 40 mg/dL (range 20-80) Median HDL cholesterol: 40 mg/dL (IQR 30-50) Mean TG: 150 mg/dL (range 50-300) Median TG: 150 mg/dL (IQR 100-200)
Renal function	<ul style="list-style-type: none"> Mean eGFR: 60 mL/min/1.73m² (range 30-100) Median eGFR: 60 mL/min/1.73m² (IQR 50-70) Mean serum creatinine: 1.2 mg/dL (range 0.8-2.0) Median serum creatinine: 1.2 mg/dL (IQR 1.0-1.5)
Liver function	<ul style="list-style-type: none"> Mean ALT: 40 U/L (range 10-100) Median ALT: 40 U/L (IQR 30-50) Mean AST: 40 U/L (range 10-100) Median AST: 40 U/L (IQR 30-50)

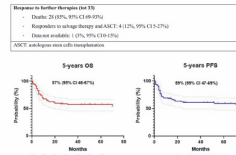


Figure 1. 5 years overall survival (OS) and progression free survival (PFS) of the whole cohort.

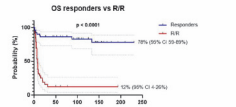


Figure 2. Overall survival (OS) difference between responders and nonresponders (RR).

Table 3. Impact of immunological variables on survival

CD4 nadir < 50	<ul style="list-style-type: none"> OS: HR 1.5 (95% CI 1.1-2.0), p=0.008 PFS: HR 1.8 (95% CI 1.3-2.5), p=0.001
CD4 nadir < 100	<ul style="list-style-type: none"> OS: HR 1.2 (95% CI 0.9-1.6), p=0.15 PFS: HR 1.5 (95% CI 1.1-2.0), p=0.005
CD4 nadir < 200	<ul style="list-style-type: none"> OS: HR 1.1 (95% CI 0.8-1.5), p=0.45 PFS: HR 1.4 (95% CI 1.0-1.9), p=0.01
CD4 nadir < 350	<ul style="list-style-type: none"> OS: HR 1.0 (95% CI 0.7-1.4), p=0.95 PFS: HR 1.3 (95% CI 0.9-1.8), p=0.02
CD4 nadir < 500	<ul style="list-style-type: none"> OS: HR 1.0 (95% CI 0.7-1.4), p=0.95 PFS: HR 1.2 (95% CI 0.8-1.7), p=0.03

Abstract OC-63 Figures 1,2 and Tables 1-4

used in this population, but a larger sample and further studies to clarify which prophylactic approach is the most effective are needed.

HIV associated comorbidities: pressing matters

OC-64 COGNITIVE PERFORMANCE IN OLDER PEOPLE WITH AND WITHOUT HIV IN THE GEPO COHORT

¹A Calcagno, ²A Tommasi, ³L Patetta, ⁴J Milic, ⁵A Coin, ⁶C Musci, ⁷S Calza, ⁸BM Ceselia, ⁹S Gardin, ³D Azzolino, ¹⁰E Lenotti, ¹M Ferrara, ¹¹B Fioretti, ¹²G Madeddu, ¹F Barrera, ¹³G Orfino, ⁴G Gualardi, ¹¹E Focà. ¹Unit of Infectious Diseases, Department of Medical Sciences, University of Turin, Turin, Italy; ²Department of Infectious Diseases, Azienda Ospedaliero-Universitaria di Perugia, Perugia, Italy; ³Geriatric Unit, Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico di Milano, Milano, Italy; ⁴Department of Mother, Child and Adult Medicine and Surgical Science, Infectious Disease Clinic, University of Modena and Reggio Emilia, Modena, Italy; ⁵Geriatric Unit, University of Padova, Padova, Italy; ⁶Centre of Gerontological Evaluation and Research, University of Modena and Reggio Emilia, Modena, Italy; ⁷Unit of Biostatistics and Bioinformatics, Department of Molecular and Translational Medicine, University of Brescia, Brescia, Italy; ⁸Division of Infectious Diseases, Department of Clinical and Molecular Biomedicine, University of Catania, ARNAS Garibaldi, Catania, Italy; ⁹Unit of Infectious Diseases, Department of Internal Medicine, Azienda Ospedaliero-Universitaria di Padova, Padova, Italy; ¹⁰Geriatric Unit, University of Brescia and ASST Spedali Civili Hospital, Brescia, Italy; ¹¹Department of Infectious and Tropical Diseases, University of Brescia and ASST Spedali Civili Hospital, Brescia, Italy; ¹²Unit of Infectious and Tropical Diseases, Department of Medical, Surgical and Experimental Sciences, University of Sassari, Sassari, Italy; ¹³Unit of Infectious Diseases, 'Divisione A', Amedeo di Savoia Hospital, ASLTO2, Torino, Italy

10.1136/sextans-ICAR-2024.58

Background Older people living with HIV (OPWH) display multiple risk factors that may contribute to lower cognitive performance when compared to people without HIV (PWoH). Recent data reported a worrisome higher risk of dementia in OPWH. Aim of this study is to describe cognitive performance in OPWH and OPWoH in the GEPO cohort. **Methods** This was a cross sectional study of participants enrolled in the GEPO cohort who were assessed for cognitive performance with: the Mini-Addenbrooke Cognitive Examination test (MACE) and the Grooved Pegboard Test (GPT). Impaired cognitive performance was defined as MACE score ≤21 and as motor speed ≥2 SD of normative values of non-dominant hand (ndh-GPT). Additionally OPWH from

Modena site were evaluated for cognitive performance with Cog-state battery. Each individual CogState raw score was transformed into a Z-score correcting for age and gender. A global NF performance score was defined as the mean of Z-score by averaging individual task Z-scores. Impaired cognitive performance was defined by total global deficit score (GDS) > 0.5. Multimorbidity (MM) was defined as the presence of at least 3 comorbidities and polypharmacy (PP) as the use of >5 drugs (excluding antiretroviral regimen) in the same individual. Anticholinergic burden was measured using anticholinergic burden score. Data are presented as number (%) or mean (SD).

Results We included 240 OPWH and 52 OPWoH. Age was significantly lower (73.7 vs. 81.1 years, p<0.001) and male sex was more represented (85 vs 25%, p<0.001) in OPWH. In this group mean CD4 was 647 (307) and HIV RNA was <50 copies/mL in 194 (83%). Antiretroviral treatment included INSTI in 75%, NNRTI 28% and boosted PI in 18%. MM (56 vs. 58%, p=0.8) and PP (29 vs. 35%, p=0.4) were equally prevalent in cases and controls.

MACE scores were similar in the two groups (22.8 vs. 22.8, p=0.9 and <21 in 34 vs. 40%, p=0.4) while ndh-GPT scores were significantly lower in OPWH (Z-scores 1.23 vs. 3.33, p<0.001 and abnormal in 24 vs. 56%, p<0.001). Impaired cognitive performance was present in 110 (45.8%) OPWH and in 36 (69.2%) PWoH (p=0.002).

Age was the only predictor of impaired cognitive performance (aOR 1.09, 95CI 1.04–1.15, p<0.001) after adjustment for sex, HIV status, MM, PP and anticholinergic burden score. In a separate multivariate analysis restricted to OPWH (additionally adjusted for HIV duration and CD4 nadir), age was confirmed to be the only predictor of the outcome variable (aOR 1.08, 95CI 1.03–1.14, p=0.004). In the group of 129 OPWH assessed with Cogstate, abnormal GDS was observed in 28 (21.7%) and it was associated with older age (73.3 vs. 69.3, p<0.001) and the absence of MM (92.1% vs 75%, p=0.020).

Conclusion This preliminary data from the GEPO cohort suggest that age is the main driver of impaired cognitive performance in older individuals and that HIV infection does not seem to be a significant contributing factor. Motor speed seems to be less impaired in OPWH, but lower age may be a relevant confounder. Longitudinal data are needed in order to predict cognitive trajectories in ageing participants with and without HIV infection.