data and risk factors in one of the largest groups of pts. with lymphomas described so far, with majority diagnosed in the second half of 2020 and early 2021.

Patients and methods. A total of 360 pts. followed for lymphoma and participated in NiHiL project in 7 centers in the Czech Republic and with COVID-19 diagnosis during the period from February 2020 to February 26 2021 were included. The lymphoma and COVID-19 characteristics were analysed and descriptive stastistic were used.

The median age of the whole group was 65 years (19-89), 58% of them were men, and 55% pts were on the antilymphoma therapy. In terms of lymphoma subtypes, there were 181 (50%) aggressive B-NHL, of which 127 patients with DLBCL and 47 with MCL. 107 patients (30%) with indolent B-NHL, of which 62 patients with FL, 18 MZL, 9 SLL, 7 LPL. 27 (7.5%) patients with T-NHL and 45 (12.5%) with HL. The median follow-up from the diagnosis of COVID-19 was 3 months (1-13), 48% of patients had to be admitted to the hospital. Out of those who required hospitalization died 40% . Overall mortality rate was 21%.

There was no difference in mortality between NHL subtypes, while patients with HL had a significantly lower risk of mortality (hazard ratio 0.32, 95% CI [0.158, 0.648], P 0.04). However, there were fewer patients (44%) with HL on the active treatment of lymphoma, compared to the whole group of NHL (56%), in the group of aggressive NHL even 64%. A lower median age of patients with HL (47) may also contribute to this finding.

Active treatment of lymphoma at the time of infection represented a significantly higher risk of death (hazard ratio 2.25, 95% CI [1.428, 3.546], P 0.001). We did not show a statistically significantly higher mortality with rituximab containing regimens compared to chemotherapy alone. A higher risk of mortality was demonstrated in patients with relapsed, progressive disease (Hazard Ratio 2.08, 95% CI [1.073, 4.034], P 0.01).

Our data confirm an increased risk of mortality, especially in patients with NHL, compared to the general population. The slightly lower risk of mortality compared to previously published data can be explained by the higher incidence of cases with a milder course, recorded for analysis, treated only on an outpatient basis for COVID-19, which did not require hospitalization. The higher risk for patients in active treatment suggests the need for active immunization before treatment, where possible, and the need for effective therapy in case of infection during ongoing anti-tumor therapy, including the use of monoclonal antibodies to treat COVID-19 infection.

Keywords: Cancer Health Disparities

No conflicts of interests pertinent to the abstract.

286 | OUTCOMES OF PATIENTS WITH LYMPHOMA AND COVID-19: AN OBSERVATIONAL COHORT STUDY FROM GELTAMO SPANISH GROUP

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Introduction: COVID-19 is thought to be more frequent and severe in patients with cancer. Lymphoma patients may be especially vulnerable, due to the immunodeficiency and immune dysregulation caused by the lymphoma itself and the antitumor treatments. This study describes the characteristics and outcomes of lymphoma patients after developing COVID-19.

Methods: This is a retrospective multicentre study carried out in the hospitals of the GELTAMO group, which included patients with a histological diagnosis of lymphoma and confirmed SARS-COV-2 infection before June 30th, 2020. The primary outcome was overall survival (OS) 60 days after a COVID-19 diagnosis.

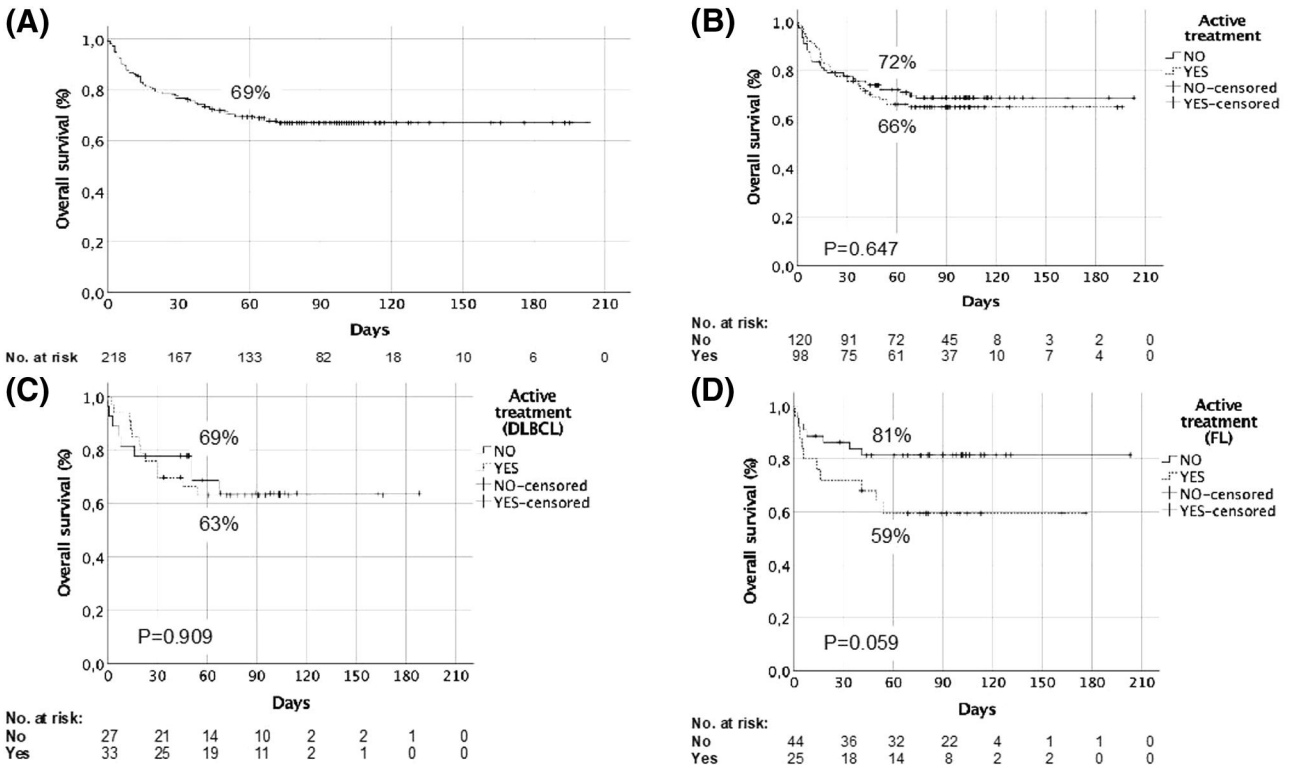

FIGURE 1 Overall survival in the whole series (A), and according to active treatment in the whole series (B), in patients with diffuse large B-cell lymphoma (DLBCL) (C) and in patients with follicular lymphoma(FL) (D)

Results: A total of 218 patients (median sage 69.5 [21-94] years, 54% male) were included; 100 patients had an indolent B-cell non-Hodgkin's lymphoma (NHL), 67 aggressive B-cell NHL, 19 mantle-cell lymphoma, 15 peripheral T-cell lymphoma, and 17 Hodgkin's lymphoma. Patients had received a median of 1 line (0-7) of therapy, and 44.9% were on active treatment at the time of COVID-19 diagnosis. Only 6.4%, 1.8% and 0.9% of patients had received previously autologous stem-cell transplantation, allogeneic SCT and CAR-T cell therapy, respectively. 89% of patients were hospitalized, 71% required oxygen, and 15% mechanical ventilation. With a median follow-up of 91.5 days (13-203), 65 patients have died (60 from COVID-19, 4 from lymphoma, 1 due to other causes), with an estimated 60-day OS of 68.6% (95% CI 62.1–75.1) (figure 1A). In univariate analysis, baseline characteristics associated with decreased OS were age ≥70 years, hypertension, diabetes, other cancer, active disease and hypogammaglobulinemia, but only age ≥70 years maintained independent influence in the multivariate analysis (HR 3.29, 95% CI 1.86-5.83, $p < 0.001$). Active treatment did not significantly impact OS (figure 1B). Univariate analysis revealed different prognostic factors, apart from age, for patients with DLBCL (N = 60) and FL (N = 69). While the presence of active disease had a prognostic impact on DLBCL (60-day OS 56% vs 79%, $p = 0.038$) but not on FL (60-day OS 65% vs 78%, $p = 0.181$) patients, the opposite occurred in the case of active treatment, which seemed to have a negative influence only in patients with FL, as shown in figures 1C and 1D.

Conclusions: Our results confirm a high mortality in patients with lymphoma and COVID-19, especially in those ≥70 years old. In patients with DLBCL, disease control seems essential to reduce the risk of mortality in the event of contracting the infection. By contrast, in patients with FL, delaying the start of treatment until it is not strictly necessary should be considered, and these patients should be prioritized to be vaccinated before starting antitumor treatment. This study provides initial data to develop recommendations for the management of lymphoma patients during the COVID-19 pandemic.

Keywords: Lymphoid Cancers – Other, Therapeutics and Clinical Trials in Lymphoma - Other

No conflicts of interests pertinent to the abstract.

286 bis | SEROLOGICAL RESPONSES AFTER SARS-COV-2 VACCINATION FIRST DOSE IN PATIENTS WITH LYMPHOID MALIGNANCY: FIRST INTERIM ANALYSIS OF THE UK PROSECO STUDY

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