

PATIENT-REPORTED OUTCOMES IN PATIENTS WITH ADVANCED NSCLC BEFORE AND DURING THE COVID-19 PANDEMIC

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INTRODUCTION

Patients with lung cancer under treatment have been associated with a high risk of Coronavirus SARS-CoV-2 (COVID-19) infection and potentially worse outcome, however, real-world data on patient-reported outcomes (PRO) regarding the pandemic are still scarce. Here, we used the

prospective, national clinical research platform CRISP to show patients' characteristics and PRO in patients with locally advanced or metastatic non-small cell lung cancer (NSCLC, stage IIIB/C, IV) before and during the COVID-19 pandemic in Germany.

METHODS

CRISP is a prospective, observational, open, multicentre, interdisciplinary clinical research platform collecting data on (sequential) treatments, patient and tumour characteristics, biomarker testing, clinical outcome and PRO from currently 174 hospitals and practices in Germany (NCT02622581; Griesinger et al., 2021; Sebastian et al., 2021). Patients with advanced stage III B/C and IV NSCLC who started first-line treatment between March 1st, 2019 and February 29th,

2020 (pre-pandemic group) and those with first-line treatment start between March 1st, 2020 and February 28th, 2021 (pandemic group) were included in this analysis.

Health-related quality of life (HRQoL) was assessed by the 36-item Functional Assessment of Cancer Therapy-Lung (FACT-L) consisting of the 27-item FACT-General (FACT-G) and the 9-item lung cancer subscale (LCS). Items are rated on a 5-level Likert-type

scale. Anxiety and depression were assessed by the 4-item Patient Health Questionnaire 4 (PHQ-4) including the subscales PHQ-2 for depression and the Generalized Anxiety Disorder Scale-2 (GAD-2). Patients were asked to fill in questionnaires at time of recruitment (baseline), every 2 months until month 12 and thereafter every 3 months for up to 36 months. Here, we evaluated questionnaires until month 12 using descriptive statistics.

RESULTS

Recruitment was slightly higher in the pre-pandemic (n=1616) than in the pandemic period (n=1233). PRO data have been documented for 1162 patients (72%) in the pre-pandemic and for 916 (74%) in the pandemic group. Return rates at month 2 to 12 were almost identical between the two groups.

In both groups, almost 60% of patients were male (Table 1). Median age was 67 years in the pre-pandemic vs. 65 years in the pandemic group. ECOG performance status was 0 in about 30% of patients, comorbidities occurred in 85% of patients in both groups.

Regarding HRQoL, the mean baseline total scores of the FACT-G were 70.9 for pre-pandemic and pandemic group and thus identical for both samples.

There were no substantial differences in the mean-change-from-baseline for the FACT-L subscale scores for physical, social/family, emotional, and functional well-being, LCS score and FACT-L total score (Figure 1 A-F).

Regarding anxiety and depression, the mean baseline total scores of the PHQ-4 were 3.6 for pre-pandemic vs. 3.5 for pandemic group. Subscale scores of the

CONCLUSION

These prospectively collected real-world data provide insight into the characteristics and PRO of patients with advanced NSCLC prior to and during the COVID-19 pandemic. Despite first publications and common expectations our results show no impact of the COVID pandemic neither on prevalence nor on the development of Anxiety and Depression in the first 12 months of patients with metastatic NSCLC compared to a pre-pandemic control.

For the patients, the pandemic seems to be less of a burden than the disease itself, as there is a considerable proportion of patients with high anxiety and depression scores in both the pre-pandemic and pandemic group. Whether different treatment options effect PRO of patients and how patients' clinical outcome might differ between the pre-pandemic and pandemic group will be subject of further analyses.

Table 1

Characteristics at inclusion	Pre-pandemic sample	Pandemic sample
Patients N	1162	916
Age		
Median (Years)	66.6	65.3
25th / 75th quantile	59.7 - 73.7	59.7 - 72.3
Missing n (%)	0 (0.0%)	0 (0.0%)
Sex		
Male n (%)	695 (59.8%)	513 (56.0%)
Female n (%)	467 (40.2%)	403 (44.0%)
Missing n (%)	0 (0.0%)	0 (0.0%)
ECOG		
0 n (%)	345 (29.7%)	298 (32.5%)
1 n (%)	550 (47.3%)	397 (43.3%)
≥2 n (%)	139 (12.0%)	118 (12.9%)
Unknown n (%)	127 (10.9%)	87 (9.5%)
Missing n (%)	1 (0.1%)	16 (1.7%)
Any comorbidity		
Yes n (%)	988 (85.0%)	779 (85.0%)
No n (%)	174 (15.0%)	135 (14.7%)
Missing n (%)	0 (0.0%)	2 (0.2%)
Tumour stage		
IIIB n (%)	47 (4.0%)	24 (2.6%)
IIIC n (%)	36 (3.1%)	26 (2.8%)
IIVa n (%)	489 (42.1%)	364 (39.7%)
IIVb n (%)	512 (44.1%)	452 (49.3%)
IIVa or IIVb n (%)	30 (2.6%)	26 (2.8%)
Not derivable (yet) n (%)	48 (4.2%)	24 (2.7%)

Table 1 Patient and tumour characteristics

Characteristics of patients with documented PRO data from the pre-pandemic (n=1162) and the pandemic sample (n=916) at baseline.

Figure 1

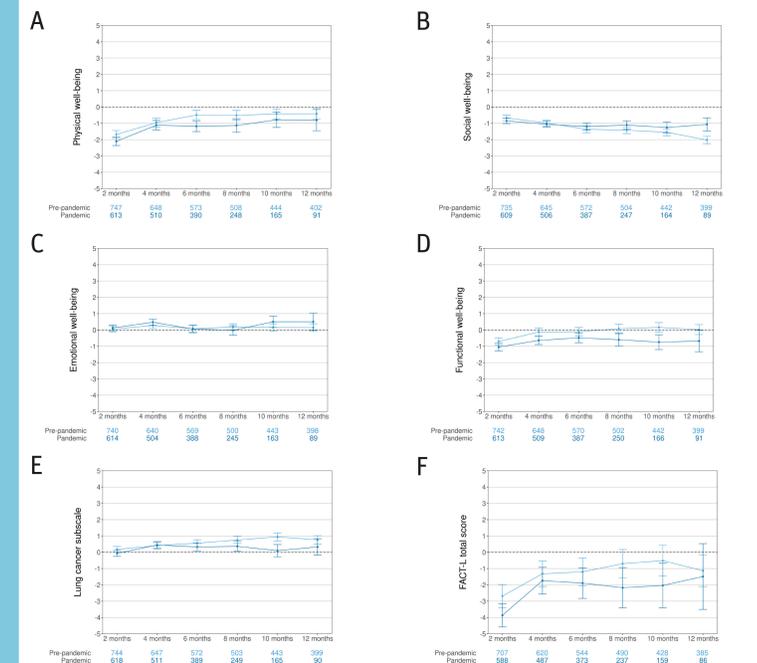


Figure 1: Mean change from baseline FACT-L subscales and total score

Mean-change-from-baseline plots (mean ± 95% CI) for the FACT-L subscales physical well-being (A), social well-being (B), emotional well-being (C), functional well-being (D), and the lung cancer subscale LCS (E), as well as for the FACT-L total score (F) for patients from the pre-pandemic and pandemic sample for month 2 to 12. Change from baseline is calculated as mean of the individual difference between baseline and respective time point for all patients with data available at baseline and the respective time points.

Figure 2

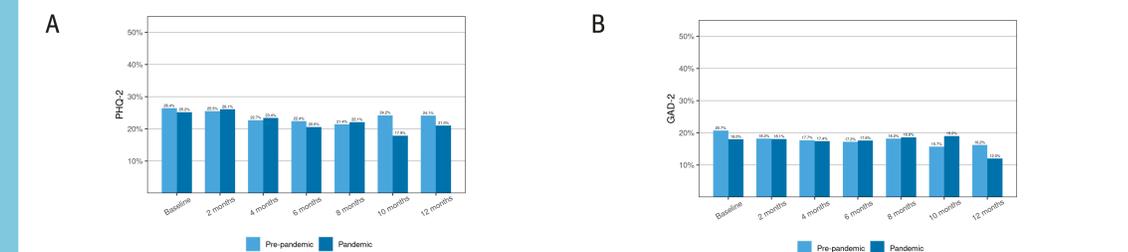


Figure 2: Probable cases of depression (PHQ-2) and anxiety (GAD-2)

Proportion of probable cases of depression (A) and anxiety (B), respectively, for patients from the pre-pandemic and pandemic sample for baseline to month 12.