CLINICAL RESEARCH PLATFORM INTO MOLECULAR TESTING, TREATMENT AND OUTCOME OF NON-SMALL CELL LUNG CARCINOMA PATIENTS

BACKGROUND
Lung cancer is the most common cancer diagnosed and the leading cause of cancer death worldwide. In Germany it is the second most common cancer diagnosis in men and the third most common in women. Non-small cell lung cancer (NSCLC) accounts for 85% of the cases.

CRISP (Clinical Research platform Into molecular testing, treatment and outcome of non-Small cell lung carcinoma Patients) is a non-interventional, prospective, multi-center clinical research platform whose aim is to understand current treatment reality of patients with lung cancer in Germany. Here we present data of patients diagnosed with early-stage NSCLC (II/IIIB/C only if treated with curative intent), including first outcome data in routine-care.

METHODS
Since August 2018 over 100 sites in Germany (cancer centres, hospitals and of- fice-based oncologists) have recruited more than 2700 patients diagnosed with NSCLC stage I, II or III (recruitment of stage I possible from December 2020). Detailed patient and tumor characteristics, treatment strategies, outcome and PRO (patient-reported outcomes) data are collected and analyzed. At the time of database cut (30 June 2021) 1010 patients had been recruited in CRISP with NSCLC in stage I, II or III from 106 study sites. Here we present data on the first 810 patients, for whom at least the year of birth, sex and data on the initial treatment had been documented and who had been followed until 30 June 2021. The treatment of non-metastatic NSCLC is mostly driven by detailed therapeutic staging. Accordingly, data are analysed and results are shown in subgroups by clinical stage.

RESULTS
Patient and tumour characteristics
95% of the 810 patients’ cases were discussed in a tumour board.

26% of patients were diagnosed with preheathcare-stage II (55% with stage IIA, 23% with stage IIB), and 66% with stage III disease (52% with stage IIIA, 16% with stage IIIB/C). Only 1% of the patients had a tumor in stage I; this is due to the difficulty of an early diagnosis as well as due to the later start of recruitment of patients with tumors in stage I in CRISP. The exact early stage could not be determined at diagnosis for 6% of the tumors. The most frequent tumor histologies were adenocarcinoma (52%) and squamous cell carcinoma (39%).

Median age at diagnosis was 65 years, 38% were women. 62% men, 83% of the patients had an ECOG 0. 80% of the patients presented with comorbidities: 67% had a Charlson comorbidity index of 0. Almost 70% of the patients were current smokers or heavy ex-smokers, while only 9% were never-smokers. (Tables 1-2).

Treatment reality - Sequential treatment
Treatment strategies were analyzed for patients with at least one year follow-up (Figure 1).

The most common treatment strategy for patients with clinical stage II tumors (n=188) was surgery (86%, n=157) followed by adjuvant chemotherapy (CTx) (15%, n=26). For patients with clinical stage IIIA tumors (n=256) the most frequent treatment strategy was surgery (53%, n=242) followed by adjuvant CTx (37%, n=98). 27% of the patients (n=66) were treated with definitive radiochemotherapy (RTCTx).

For patients with stage IIIB/C tumors (n=249) the most frequent treatment was definitive CTx (n=235), 26% (n=64) started with CTx and 18% (n=46) had initial surgery (followed mostly by CTx, n=36, 15%).

Biomarker Testing
Overall, 68% of 810 tumors (660) were tested for PD-L1.

80% (n=531) of the non-resectable stage III tumors who were treated with RTCTx (n=236) were tested for PD-L1 expression. 80 patients had positive PD-L1 expression, which corresponds to 60% of all patients and 63% of tested patients (Table 3). Taken together, 64 out of 68 durvalumab-eligible patients (best response CR/PR/SD) received consolidation therapy with durvalumab after RTCTx.

CONCLUSION
CRISP presents comprehensive current real-life data of patients with NSCLC in stage I, II or III covering all treatment settings in Germany. Patient characteristics reflect a typical population of patients with lung cancer. Most of the patients receive a sequential treatment according to the guidelines. With a longer recruitment and follow-up time, data on patients with stage I will be analysed, and further outcome data, including 5-year survival rates, will be presented.