Adherence to treatment recommendations from multidisciplinary tumor boards

J. Roeper julia.roeper@uol.de1,2, L. Ansmann3, L. Kathmann3, Alice Blanksma3, F. Griesinger1,2

1Pius-Hospital, Department of Internal Medicine-Oncology, University Oldenburg, Germany; 2Lung Cancer Network NOWEL.org, Oldenburg, Germany; Department for Health Services Research, University Oldenburg, Germany

BACKGROUND
Due to the German National Cancer Plan, cancer centers have been established. Lung cancer centers are responsible for coordinating the care of lung cancer patients in a region and to diagnose and treat them according to the latest evidence-based knowledge. For this purpose, every patient should be discussed in a multidisciplinary tumor board. In the tumor board an individual treatment plan is discussed and treatment recommendations are given. Therefore, we investigate: 1.) how are the recommendations from tumor boards being adhered to; 2.) which factors determine the adherence of tumor board recommendations and 3.) what is the relationship between the adherence of tumor board recommendations and patient outcomes in terms of overall survival?

PATIENTS AND METHODS
Data from 1784 newly-diagnosed patients with lung cancer discussed in tumor boards in one certified lung cancer center in Northern Germany between 2014 and 2018 were documented and evaluated according to the adherence to tumor board recommendations. A preliminary analysis of the first 161 cases analyzed will be presented. Data was analyzed descriptively. Figure 1 shows the study design in detail.

RESULTS
Median age of the 418 patients was 67 years (21-91 years) and 35% (n=147/418) of them were female. Most of the patients had an ECOG status of 0 or 1 (81%; n=338/418) and 87% of them were current or ex heavy smoker (n=365/418). 68% (n=289/418) of the patients that have been discussed in the multidisciplinary tumor board, were afterwards further treated at the same certified lung cancer center. In 84% (n=352/418) of patients, the treatment recommendations from the multidisciplinary tumor boards were completely adhered to. There were different reasons for non-adherence, e.g. patient’s wish, patient characteristics and death before starting therapy. The median overall survival for the 418 patients was 13 months. Patients with a complete adherence to the multidisciplinary tumor board recommendation had an overall survival of 16 months (n=355) compared to 3 months (n=39) for patients with a partial adherence compared to 3 months (n=24) for patients with a non-adherent treatment (p<0.000). Fig. 2-4 show the survival curves of adherence of tumor board recommendations.

CONCLUSION
Preliminary results give a hint to the fact that patients with an adherent treatment after first diagnosis had a longer OS than patients with another therapy. More cases will be analyzed, including patient characteristics and healthcare organizations that took over further treatment as predictors. Furthermore, the findings can be used to design interventions that improve the adherence of multidisciplinary tumor board recommendations in outpatient oncology care, optimize the quality of care.