index (BMI), according to gender-specific cut-off values. SMI was calculated as follows: cross-sectional skeletal muscle area (SMA) measured at the level of the third lumbar vertebra / (height)2 (m2). Toxicities were graded according to NCI CTCAE v.4.0. Association between the presence of sarcopenia and different adverse events was evaluated by Chi-square test. Correlation with response rate (RR, evaluated according to RECIST criteria 1.1), progression-free survival (PFS) and overall survival (OS) was assessed by the use of the log-rank test.

Results: Sarcopenia was evident in 34 (44%) patients. We observed a significant association between the presence of sarcopenia at baseline assessment and a higher risk of severe (i.e. grade 3-4) neutropenia (38% versus 18%; $p = 0.048$) and a higher risk of any grade mucosal toxicities (56% versus 34%; $p = 0.045$). None of the other investigated clinical factors (comprising age, gender, performance status, sites of metastases and previous surgery on primary tumor) was associated with the risk of toxicity. Neither sarcopenia nor the other evaluated clinical parameters were associated with outcome as measured by RR, PFS, and OS: the only exception was performance status, which was confirmed a major prognostic determinant in terms of PFS and OS.

Conclusion: Our experience identified sarcopenia as a potential determinant of the risk of hematologic and mucosal toxicities from first-line platinum plus fluoropyrimidine chemotherapy in mGC patients. Sarcopenia was apparently not associated with benefit from treatment and survival, but larger studies are needed to address this issue. Strategies aiming at improving the nutritional status of mGC patients are warranted to optimize the risk-to-benefit ratio of available treatments.

P – 299 Baseline computed-tomography (CT)-evaluated sarcopenia predicts toxicity from first-line chemotherapy in metastatic gastric cancer (mGC) patients

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Introduction: The impact of sarcopenia as a predictor of poor prognosis and its association with chemotherapy toxicity have been explored in different cancer types but remain controversial in mGC. Our aim was to explore the correlation between sarcopenia, evaluated at baseline CT scan, and toxicity and efficacy of first-line therapy.

Methods: We retrospectively analyzed pre-treatment CT scans from 78 mGC patients treated with first-line doublet chemotherapy comprising oxaliplatin and 5-fluorouracil/leucovorin or capecitabine (trastuzumab was administered in case of HER2-positive disease). Sarcopenia was defined according to previously published criteria (Martin L et al. J Clin Oncol 2013) by the use of the skeletal muscle index (SMI) and body mass