





# OUTCOME AFTER PREOPERATIVE CHEMORADIOTHERAPY FOR NON SMALL CELL LUNG CANCER WITH CHEST WALL INVASION (EXCLUDING SUPERIOR SULCUS TUMOR)

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## Objectives

Multimodality treatment including lung resection and chest wall resection is recommended for patients with chest wall-invasive (CWI) non-small cell lung cancer (NSCLC). Chemoradiotherapy (CRT) followed by surgery for CWI cancer has been reported to be safe and effective. However, there are only a few reports showing the outcomes of preoperative treatment for CWI cancer, excluding superior sulcus tumor (SST) . We will clarify the outcomes of preoperative CRT for NSCLC with CWI at our institution.

#### Methods

From 2000-2020, Seventy patients who underwent lobectomy or more for CWI NSCLC with rib involvement on CT images were included. The clinicopathological characteristics between the two groups, 20 in the preoperative CRT group and 50 in the upfront surgery (UFS) group, were clarified, and the 3/5-year OS, RFS prognosis, recurrence suites were comparatively analyzed.

### Results

The preoperative CRT group was more likely to be younger and cN0 with PS0 and fewer serious postoperative complications than the UFS group. 25% in the preoperative CRT group had pCR, 25% in the UFS group received postoperative adjuvant therapy. Median follow-up was 33.7 months. 3/5-year OS was 69/56% in the preoperative CRT group and 41/37% in the UFS group (p=0.08). 3/5-year RFS was 63/46% in the preoperative CRT group and 31/28% in the UFS group (p=0.04).

#### Conclusions

The preoperative CRT group had a better prognosis than the UFS group, but comparison with neoadjuvant nivolumab is still a Clinical Question. Prospective studies of the efficacy and safety of preoperative treatment for NSCLC with CWI should be considered.