Patients were treated consecutively in the University Hospitals of Leuven between 2005 and 2014 and their data were retrospectively retrieved. PORT + PM patients were treated with RT doses up to 64 Gy in 2-Gy fractions. PORT + NCTLC were treated with RT doses up to 60 Gy in 2-Gy fractions. Non-surgical patients were treated with RT doses up to 66 Gy in 2.75 Gy sequentially with chemotherapy or up to 70 Gy in 2 Gy fractions concurrently with chemotherapy. Dyspnea scores (CTCAE 4.03) before and after RT were retrieved and delta dyspnea was calculated as the difference between the dyspnea after RT (worse at any time point) and before RT. For every patient, 2 CT scans were retrieved: 1) CT0: a free breathing planning CT scan; 2) CT3M: deep inspiration breath-hold diagnostic follow up CT scan 3-6 months after the end of RT. CT0 and CT3M were non-rigidly co-registered in MIM. Differences in Hounsfield Unit (delta HU=HU3M-HU0) were represented as the slope of the dose-dependent delta HU between 0 and 20 Gy (expressed in delta HU/Gy). Primary endpoint was delta dyspnea >= 2. Univariate and multivariate logistic regression analysis were performed in order to identify significant predictors of delta dyspnea >= 2. A p-value of < 0.05 was considered statistically significant.

Results: Delta dyspnea >= 2 was observed in 10/27 patients (37%) in the surgical group and in 7/35 patients (20%) in the non-surgical group (chi-square test: 3.38, p=0.06). Mean delta HU/Gy was higher in the surgical group (1.63 vs. 0.67, t-test: p=0.04) (see Figure 1). Outcomes of univariate and multivariate analysis are showed in Table 1. The model with MLD, mean delta HU/Gy and mean heart dose appears to better predict a delta dyspnea >= 2 both in the surgical and non-surgical group (although not significant).

Conclusion: Surgical patients after PORT are at higher risk of developing clinically relevant dyspnea (with a delta >= 2) and have a higher increase in lung density (a surrogate of lung damage) compared with non-surgical patients. To strengthen this hypothesis, we will investigate radiation toxicity after more limited surgery (lobectomy) in NSCLC patients. Results will be available by the time of the congress.

PO-0695
Lobectomy vs Stereotactic Ablative Radiotherapy in NSCLC: a multicentric series in four centers
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Purpose or Objective: To compare outcome of patients undergoing lobectomy vs. stereotactic ablative radiotherapy (SABR).

Results: Between 2010 and 2014, 187 pts with stage I-II NSCLC were treated: 133 were male, 54 female. Mean age was 72 years. Cyto-histological prove of NSCLC was available in 167/187 (89.3%): 111 pts had adenocarcinoma, 51 squamous cell carcinoma and 3 other histologies. 133 pts (71.1%) had stage T1 NSCLC, and 54 (29.9%) stage II NSCLC. Ninety-three (49.8%) pts underwent SABR, while ninety-four (50.2%) were submitted to Lob. Pts who underwent SABR received to 9-20 Gy/die for 3-7 fractions; BED was superior than 100 Gy for all treatments. Response to SABR was evaluated according to RECIST criteria and toxicity according to CTCAE 4.0 scale. To compare Lob vs SABR, we analyzed outcomes in terms of Local Control (LC), Tumor-Specific Survival (TSS), Metastasis Free Survival (MFS) and Overall Survival (OS) using Kaplan-Meier method and log rank tests to evaluate differences in time-to-event outcomes between LOB and SABR.

Results: At a mean follow up of 23 months (range 6-67), LOB showed a better OS (p <0,014) with a 2- and 5-yr OS of 67,6±5,9% and 34.6±15,7% for SABR and 84.1±4.8% and 73.4±6.6% for LOB. SABR achieved the same results in terms of LC with a 2 and a 5 years LC of 92±3.2% and 80.6±7.9% respectively with a p<0.07. Neither significant difference in frequency of distant metastasis nor in TSS was observed between the two treatment groups (respectively p< 0.41 and p<0.50). In SABR group only 3 G3 lung toxicities were found. No other G3 or G4 acute/late toxicity was found. Toxicity was minor in SABR group (1 fatigue G1,1 dyspnoea G1,1 hemoptysis G1); in surgery group we have recorded 7 atrial fibrillation, 2 bleeding, 1 with death, 6 prolonged air leak.

Conclusion: SABR using high doses (BED>100) shows similar LC than LOB. Very encouraging results in terms of MFS and TSS with very few toxicity and no excess of tumor-related deaths are obtained with SABR compared with LOB. OS is better in LOB group, apparently being strongly influenced by the selection of pts addressed to surgery.

PO-0696
Prognostic impact of celiac/supraclavicular node metastasis in locally advanced oesophageal cancer
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Purpose or Objective: Most of trials which established the standard treatment of locally advanced oesophageal cancer included M0 stage according to the 6th edition of the AJCC staging system. Now in the 7th edition of AJCC staging system, supraclavicular and celiac lymph node (LN) metastasis are no more classified into M1, but considered same as other regional LNs. We aimed to evaluate the treatment outcomes of NACRT followed by surgery in thoracic