Abstract Group: 11.1. Lung Cancer

Keyword 1: Lung cancer / Oncology  Keyword 2: No keyword  Keyword 3: No keyword

Title: Independent prognostic und predictive value of blood vessel invasion (BVI) in curatively (R0) resected stage II and IIIA non-small cell lung (NSCLC) cancer patients

Dr. Dieter 1980 Wuerflein dieter.wuerflein@klinikum-nuernberg.de MD 1, Prof. Wolfgang M. 1981 Brueckl wolfgang.brueckl@klinikum-nuernberg.de MD 1, Dr. Dietmar 1982 Kraus dietmar-kraus@klinikum-nuernberg.de MD 2, Dr. Christian 1983 Meyer christian.meyer@klinikum-nuernberg.de MD 3, Dr. Manfred 1984 Wagner manfred.wagner@klinikum-nuernberg.de MD 1 and Prof. Joachim H. 1985 Ficker joachim.ficker@klinikum-nuernberg.de MD 1. 1 Dept. of Internal Medicine 3, Klinikum Nuernberg, Germany, 90419 ; 2 Dept. of Thoracic Surgery, Klinikum Nuernberg, Germany, 90419 and 3 Klinikum Nuernberg, Inst. of Pathology, Nuremberg, Germany, 90419 .

Body: Objective: A single center study was conducted to identify the prognostic and predictive value of blood vessel invasion (BVI) in surgically R0 resected stage II and IIIA non-small cell lung cancer patients. Methods: A total of N=105 consecutive patients who had undergone complete (R0) resection for stage II/IIIA primary non-small cell lung cancer (NSCLC) between 01/2008 and 12/2010 at the Lung Cancer Center Nuremberg were evaluated. All pathological specimens were examined for evidence of BVI. Results: The baseline clinical data showed no significant differences between patients with adjuvant chemotherapy (aCTx; cisplatin/vinorelbine; N=46) and without aCTx (N=59) beside of age (aCTx treated patients were younger p=0.03). Demographic data were as follows: age <65 years 53%; male 64%; ECOG 0/1/2 (47%/35%/3%); stage IIA/IIB/IIIA (13%/31%/55%); histology AC/SCC/other (53%/37%/10%); BVI 29%; pneumonectomy/lobectomy (19%/81%). ECOG-PS 0 and no BVI were positive prognostic factors for both recurrence free survival (RFS) and overall survival (OS) in the group without aCTx and remained independent prognostic factors in the multivariate analysis (p<0.001; p=0.002). Additionally, ECOG-PS 0 and no BVI were independent predictive factors for RFS and OS in the aCTx treated group. Conclusion: BVI is an independent prognostic and predictive factor in R0 resected stage II/IIIA NSCLC patients. This subset of patients may have a greater benefit from aCTx and may need to be followed-up more closely.