Very elderly NSCLC patients above 75 years: Response to chemotherapy and improvement in Quality of Life is achievable to the same extent as for younger patients during platinum-based doublet chemotherapy

Sørensen, Jens B.; Bæksgaard, Lene; Henriksen, Anders; Hasselbalch, Benedicte; Perrell, Katharina; Dandanell, Jette
Dept. Oncology, Finsen Centre/National University Hospital, Copenhagen, Denmark

Background: Elderly patients with Non-Small Cell Lung Cancer (NSCLC) are rarely included in clinical trials; hence the knowledge on their potential benefit from chemotherapy is limited. The purpose of this study was to illuminate to what extent very elderly patients above 75 years responded to chemotherapy and whether the palliative treatment actually improved their Quality of Life (QOL).

Methods: Patients with non-resectable NSCLC were consecutively entered from 05/2001-08/2006. Treatment until 12/2003 was cisplatin 100 mg/m² every 4 weeks and vinorelbine 25 mg/m² i.v. weekly for 4-6 courses (CiV), and from 01/2004 onward treatment was carboplatin AUC 5 (Calvert formula) every 3 weeks and vinorelbine 25 mg/m² i.v. day one and 60-80 mg/m² orally day 8 in each course for a total of 4-6 courses (CaV) dependent of response. Patients had no upper age limit, normal renal-, hepatic-, and bone marrow function and performance status 0-2. Patients gave written informed consent. EORTC QoL questionnaire C-30 and LC-13 was used.

Results: A total of 101 patients were treated, with 15 being older than 75 years (CiV 9 pts; CaV 6 pts), 41 being 70-75 years (CiV 23 pts; CaV 18 pts), and 45 being 36-69 years. Median age for patients above 70 years were for CiV 74 years (range 70-84) and for CaV 74 years (range 70-78), respectively. The characteristics for these 56 pts above 70 years were males 39%, performance status 0, 1, and 2 in 27%, 59%, and 14%, and stages IIIA, IIIB without pleural effusion, IIIB with pleural effusion, and IV in 14%, 13%, 11%, and 63%, respectively. Partial and complete responses were obtained in 8 out of 15 pts > 75 years (response rate (RR) 53%; 95% confidence limits 27-79%)(CiV RR 56%; CaV RR 50%), in 14 out of 41 pts aged 70-75 (RR 34%, 95% confidence limits 20-51%)(CiV 35%; CaV 33%), and in 38% of younger pts (95% c.l. 24-53%) (not significant). Improvement or stabilisation of QoL issues were at follows for pts >75 years, 70-75 years, and <70 years: Dyspnoea 57%, 62%, 69%; pain 71%, 74%, 76%; cough 79%, 82%, 93%; and global QoL 86%, 77%, 73%, respectively. Increased or stabilised G-I side effects were 93%, 77%, 36%; and other side effects 36%, 53%, 20%, respectively.

Conclusions: The change for achieving a response to chemotherapy is similar for very elderly pts >75 years, patients aged 70-75, and younger patients. Also the benefits with respect to improvement of lung cancer related symptoms and global QoL seems to be similar. However, this is based on very few patients in this very elderly patient group. Even though they fulfil the same inclusion criteria as their younger counterpart they clearly represent a highly selected group in good condition with preserved organ function and are a much smaller fraction of the lung cancer population in their age group than the younger patients. Thus, even though benefit from chemotherapy is possible to achieve, careful patient selection is of outmost importance in this geriatric population.