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E07-03

Treatment of Locally Advanced NSCLC, Mon, Sept 3, 16:00 – 17:30

Treatment of locally advanced non-small cell lung cancer - neoadjuvant or adjuvant chemotherapy

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Over recent years combined modality therapy has become firmly established as a standard in the treatment of patients with locoregionally advanced unresectable non-small cell lung cancer (NSCLC). In direct comparison, concomitant chemoradiotherapy was shown repeatedly to be superior to induction chemotherapy. A case can be made that concomitant chemoradiotherapy primarily addresses locoregional disease while induction chemotherapy might be better suited to eradicate distant micrometastatic foci. Therefore, continuing sequential and concomitant therapy might be beneficial and the addition of induction or adjuvant chemotherapy to the concomitant chemoradiotherapy standard have been investigated.

CALGB 39801 compared concomitant chemoradiotherapy using the carboplatin paclitaxel platform versus induction chemotherapy with carboplatin and paclitaxel for two cycles followed by identical chemoradiotherapy. While a numerical trend favored the induction chemotherapy arm, there was no significant advantage for overall survival. Similarly, the Hoosier Oncology Group evaluated the administration of concomitant chemoradiotherapy using the cisplatin etoposide platform with or without three additional cycles of consolidation chemotherapy with docetaxel. This study was based on promising pilot data generated by the Southwest Oncology Group. Again, the study showed no significant survival advantage from the addition of concomitant chemoradiotherapy. Therefore, at the present time, concomitant chemoradiotherapy should be regarded as the standard approach for most patients with unresectable non-small cell lung cancer.

Induction chemotherapy may have a role for patients with poor performance status who may not be candidates to undergo aggressive chemoradiotherapy. Certain targeted agents might be appropriate to investigate in the consolidation setting under carefully defined experimental conditions. This need is highlighted by the recent experience in SWOG 0023 in which the administration of gefitinib as maintenance therapy was found to decrease survival rates.

Session E08: New Technology for Diagnosis

E08-01

New Technology for Diagnosis, Tue, Sept 4, 16:00 – 17:30

Autofluorescence bronchoscopy and optical coherence tomography

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The lung is an internal organ consisting of a complex branching system of airways leading to gas exchange units. Lung cancer consists of several cell types instead of a single cell type. Different cell types are preferentially located in different parts of the bronchial tree. There is no single method that can detect pre-invasive cancer in the entire bronchial epithelium and allow simultaneous tissue sampling for pathological diagnosis and molecular profiling. While computerized tomography, magnetic resonance imaging and ultrasound can detect objects in the sub-milliliter scale, photonic imaging can detect structural and functional changes in cells and tissues down to the micron and sub-micron