INDUCTION THERAPY WITH PACLITAXEL AND CARBOPLATIN FOLLOWED BY HYPERFRACTIONATED RADIOThERAPY PLUS WEEKLY CONCURRENT CHEMOTHERAPY AND SUBSEQUENT CONSOLIDATION THERAPY IN UNRESECTABLE LOCALLY ADVANCED NON-SMALL-CELL LUNG CANCER

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Aims and background: The purpose of this pilot study was to determine the safety and feasibility of a complete integrated approach, including induction chemotherapy with carboplatin/paclitaxel followed by accelerated hyperfractionated radiotherapy with concurrent chemotherapy, and then by consolidation chemotherapy for locally advanced stage III non-small cell lung carcinoma.

Methods: Systemic doses of carboplatin AUC 6 and paclitaxel (200 mg/m²), 3 weeks out of 4, were planned as induction and consolidation chemotherapy. Weekly carboplatin AUC of 2 plus paclitaxel (50 mg/m²) were given during thoracic radiotherapy.

Results: Eighteen patients were enrolled: 10 were evaluated at the end of chemoradiation and 8 received consolidation chemotherapy. On an intent-to-treat basis, 55% of patients achieved a response after induction therapy, whereas chemoradiation and consolidation therapy increased the response rate by 33% and 16%, respectively. No patient experienced grade >3 acute hematologic toxicity during systemic-dose chemotherapy. With the exception of one episode of a severe cardiac adverse event, non-hematologic toxicity was similarly tolerable. Severe acute adverse events observed during concurrent chemoradiation were mainly represented by esophagitis, resulting in interruption of the radiotherapy in 25% of patients. More notably, only one patient experienced serious non-hematologic late toxicity.

Conclusions: Although the present approach seemed feasible, our data did not support any possible advantage in favor of this three-phase integrated treatment, and therefore the design will not be investigated in a subsequent phase II study.

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