

Maintenance Therapy in Patients with Advanced Non–Small Cell Lung Cancer

Running title: NSCLC, and Maintenance Treatment

Khaled Kamal El Din Abd El Aziz, MD,* Naser Mohamed Abd El Bary, MD,* Mohamed Abo El Fetouh Shehata, MD,* Suzan Ahmed Alhassanin, MD,* Suzy Fawzy Gohar, MD,* Amira Hosny Hegazy, MSC*

Authors affiliation:

*Clinical oncology department, Faculty of medicine, Menoufia University, Menoufia, Egypt.

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Corresponding authors:

Amira Hosny Hegazy.

Assistant lecturer of clinical oncology.

El deeb street, Menouf, Menoufia governate, Egypt.

Tel: 01090432337

Email: amirahegazy28@yahoo.com.

Abstract:

Objectives: To evaluate weekly paclitaxel effect as a continuation maintenance therapy in advanced non-small cell lung cancer (NSCLC) patients as regard time to progression, Response rate, toxicity, quality of life, and overall survival.

Background: Maintenance continuation therapy refers to systemic therapy(include one of the agents that was given in first line) that given for advanced NSCLC patients after 4 to 6 cycles of first-line chemotherapy if they have responded or have stable disease without progression until progression or unacceptable toxicity.

Patients and methods: **Inclusion criteria:** Histological diagnosis of NSCLC.,Stage IIIB or IV , performance status (PS) ≤ 2 .**Exclusion criteria:** P.S >2 , Comorbidities (diabetic neuropathy, advanced cardiac disease) ,Patients who developed grade II-III neuropathy .Those patients will receive carboplatin(AUC 5) – paclitaxel (175 mg/m²) for 4cycles , and will be evaluated every 2 cycles, then the patients with initial good response, or stable disease will be randomized into 2 arms , the first arm , will receive weekly paclitaxel(70mg/m²) as maintenance continuation therapy , and the second arm will be kept under follow up.

Results:This study includes 92 patients, 46 in the maintenance arm, 46 in the control arm, the median survival for maintenance arm was 29 months, while in the control arm was 12 months, p.value =0.047.The median progression free survival was 8 months for both arms, p.value =0.78.

Conclusion:Maintenance treatment with paclitaxel increased survival in advanced NSCLC patients.

Keywords: Carcinoma, Maintenance, Non–small cell lung .