

# Carboplatin in Combination with 3-Weekly Paclitaxel as First-Line Therapy in Patients with Recurrent/Metastatic Head-and-Neck Cancers: A Regional Cancer Center Experience

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## INTRODUCTION

- Head-and-neck cancers (HNCs) collectively are the sixth most common malignancy diagnosed worldwide and treatment in recurrent/metastatic setting is challenging [1,2].
- Palliative treatment is considered as a treatment option for the majority of the recurrent/metastatic HNC patients [3].
- For patients with R/M HNSSC, the EXTREME regimen has been the standard of care in the first-line treatment with an overall response rate (ORR) of 36%, a median progression-free survival (PFS) of 5.6 months, and a median overall survival (OS) of 10.1 months [4-6].
- However, the OS in R/M HNSSC patients hardly exceeds 1 year.[7]
- At our institution, paclitaxel and carboplatin given 3 weekly is the preferred regimen in patients ineligible for cisplatin or cetuximab: Due to various reasons including patient's choice and logistics.

## STUDY OBJECTIVES

We retrospectively evaluated the efficacy and tolerability of carboplatin and paclitaxel as first-line treatment in patients with R/M HNSSC.

## MATERIAL AND METHODS

- We retrospectively reviewed the data of R/M HNSSC patients who received Paclitaxel, at a dose of 175 mg/m<sup>2</sup> by a 3-h infusion followed by carboplatin AUC- 5 every 3 weekly combination as first-line therapy at Medical Oncology Department of Kidwai Cancer Institute, Bangalore, between January 2018 and January 2020.
- Patients with the ECOG of 0–2 and at least unidimensional measurable lesion by imaging were included.
- Exclusion Criteria: Patients with concomitant malignancy, nasopharyngeal primary, or progressive disease within 6 months of platinum-based treatment and patients eligible for local therapy (surgery or re-irradiation) at the time of recurrence.

- The patients were evaluated for response assessment after the first three cycles and at the completion of six cycles of chemotherapy clinically and radiologically.
- Patients were followed up clinically every 2 months after completion of six cycles of chemotherapy till the last date of follow-up.
- RECIST 1.1 criteria was used to assess response to therapy and CTCAE versions 4.03 for toxicity assessment.
- Kaplan–Meier survival analysis was used for the estimation of PFS and OS.

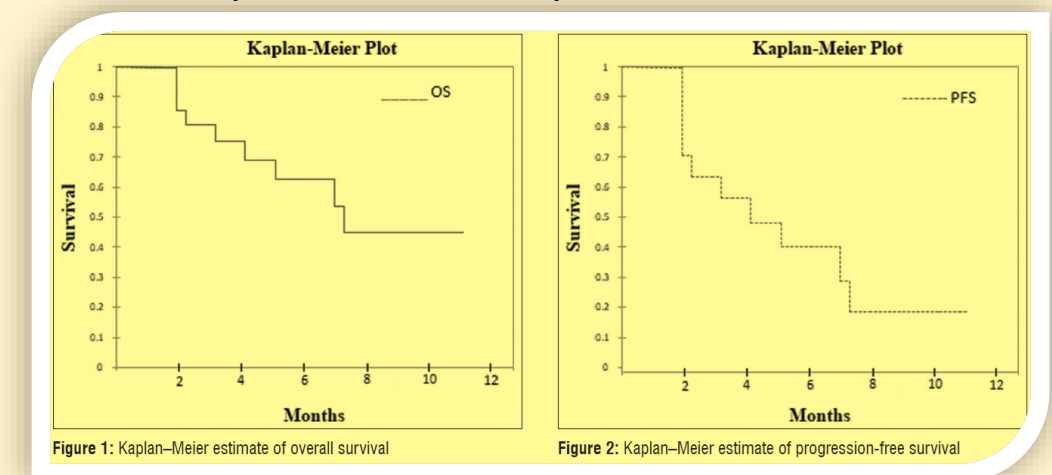
## RESULTS

- 182 total patients with R/M HNSSC received carboplatin and paclitaxel combination chemotherapy 3 weekly as first-line therapy during the study period.
- The median age of patients at baseline was 49.00 ± 9.36 years within the range of 32–78 years and male-to-female ratio was 2.8. Most of the patients (58.7%) had an ECOG PS 1. The most common site was oral cavity (37.9%), followed by the oropharynx (28.8%).
- The radiological response rate after three cycles and after six cycles of chemotherapy mentioned in Table 2.
- The ORR and DCR at the end of three cycles were 26.4% and 66.0% and after the completion of six cycles were 15.4% and 40.7%, respectively.

**Table 2: Radiological response after three cycles and six cycles of chemotherapy**

Response	After three cycles, n (%)	After six cycles, n (%)
Complete response	0	0
Partial response	48 (26.4)	28 (15.4)
Stable disease	72 (39.6)	46 (25.3)
Progressive disease	44 (24.1)	30 (16.5)
Lost to follow-up (unevaluable)	18 (9.9)	16 (13.3)

- The median OS was 8.2 months (95% CI: 6.8–9.7), with a 1-year survival of 40.65% and the median PFS was 4.3 months (95% CI: 2.9–5.6) in Kaplan Meier figure 1. And figure 2.
- Among patients progressed at the time of the last follow-up, 71.8% were started on oral metronomic chemotherapy and 28.2% patients considered for BSC.
- The rate of toxicities with febrile neutropenia - 6.6%. The rate of other Grade 3–4 hematological toxicity – 19.8%, mucositis – 1.6%, and diarrhea – 2.7%. Dose modification due to adverse events was reported in 15.3% patients.



## CONCLUSION

- The study can be concluded that the combination of carboplatin with 3-weekly paclitaxel is effective and tolerable in patients suffering from R/M SCCHN.
- The results showed that this combination has significant activity, with the DCR of 40.7% in first-line treatment of R/M SCCHN.
- Toxicities were manageable and were tolerated in the outpatient clinic, with 3-weekly adjustments of dosages according to toxicity.

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