COMPARING THE OUTCOME OF DOUBLET THERAPY (GEMCITABINE AND CISPLATIN) WITH TRIPLET THERAPY (GEMCITABINE, CISPLATIN, AND NAB-PACLITAXEL) IN LOCALLY ADVANCED OR METASTATIC GALL BLADDER CANCER PATIENTS, AN OPEN-LABEL RANDOMIZED CONTROL TRIAL

Chandrani Khatri, Pratap K.Das, Rajit Rattan, Abhinav Narwariya, Jayanta Patowary

Purpose: To compare the doublet chemotherapy (gemcitabine and cisplatin GC ) which is a standard of care in locally advanced or metastatic gall bladder cancer to a triplet chemotherapy (gemcitabine, cisplatin and nab-paclitaxel GCP) regime which has shown promising results in a single arm phase II study.

Methods: 60 patients with locally advanced or metastatic gall bladder cancer were randomized, 30 in each arm. Arm A received 2 drugs gemcitabine 1000mg/m2 & cisplatin 25mg/m2 on Day1 and Day 8 of 21-day cycle and arm B received 3 drugs, gemcitabine 1000 mg/m2 , cisplatin 25 mg/m2 , and nab-paclitaxel 125 mg/m2 , on days 1 and 8 of 21-day cycle. Primary end point of the study was overall response rate and secondary endpoint was mPFS and mOS. Evaluation was done post 3 and 6 cycles of chemotherapy with 2 year follow up every 6 months.

Results: The combination of GC (arm A) showed an overall radiological response rate (complete response and partial response) of 13.3% while it was 61.9 % in patients who received GCP (p-value of 0.004) (Fig. 1). The mPFS for arm A was 4.5 months (95% CI, 4.0-4.9) vs 7.6 months (95% CI, 3.9-11.2) for arm B, with a p-value of ≤ 0.05(Fig. 2). The mOS for the doublet was 9.2 months (95% CI 2.6-15.7) vs not reached for the patients who were treated with GCP. All grade neutropenia, thrombocytopenia, diarrhea, fatigue, and peripheral neuropathy were significantly higher in the patients receiving triplet chemotherapy, with a p=0.024, p=0.01, p=0.001, p=0.04, p=0.001 respectively. There was no increase in grade 3 adverse events with the addition of nab-paclitaxel.

Conclusion: To conclude, our study showed that the triplet chemotherapy with GCP was significantly better in terms of overall response rate, and mPFS with a longer follow up needed to comment on mOS.