CarbOplatin in Metastatic castrate resistant Prostate Cancer: A retrospective study of heavily pre-treated patients (COMPACT)

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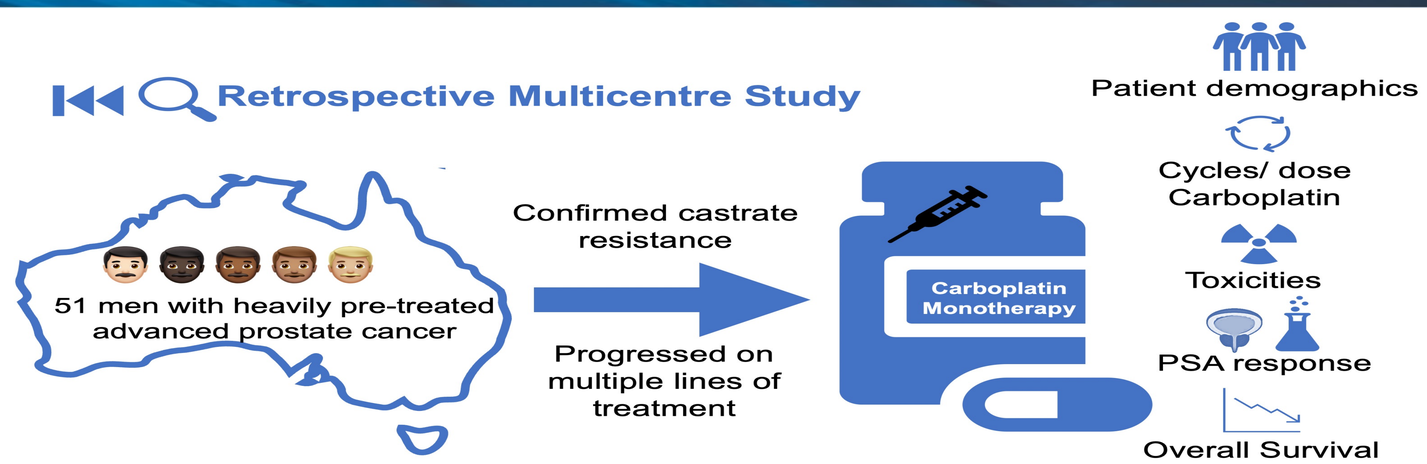
BACKGROUND

Despite a lack of up-to-date clinical trial data, many clinicians advocate the use of Carboplatin monotherapy to treat patients with advanced Castrate Resistant Prostate Cancer (CRPC) who have exhausted other treatment options. At the 2017 APCCC, 96% of panellists voted for the use of carboplatin last line in selected CRPC patients[1].

Aim: To determine the overall survival (OS) and response rate in patients with advanced CRPC treated with Carboplatin monotherapy after progressing on other chemotherapy agents

METHODS



RESULTS

Median age: 68 (range 55-86)

Gleason score	No. of patients
≤6	2
7	12
8	8
≥9	23
Unknown	1

Metastasis at diagnosis	No. of patients
Yes	25
No	23
Unknown	3

Characteristic	Value
Median PSA at diagnosis (ng/ml)	11 (range 0.6-3049)
Median PSA pre-Carboplatin (ng/ml)	160 (range 0.2-2408)

Characteristic	Value
Median time to castrate resistance from start of ADT start (months)	24 (range 3-168)

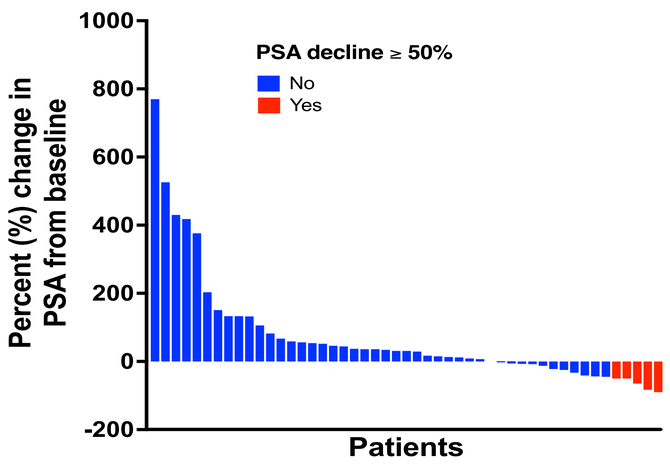


Figure 1: Waterfall plot showing the maximal Prostate Specific Antigen (PSA) from baseline following Carboplatin monotherapy.

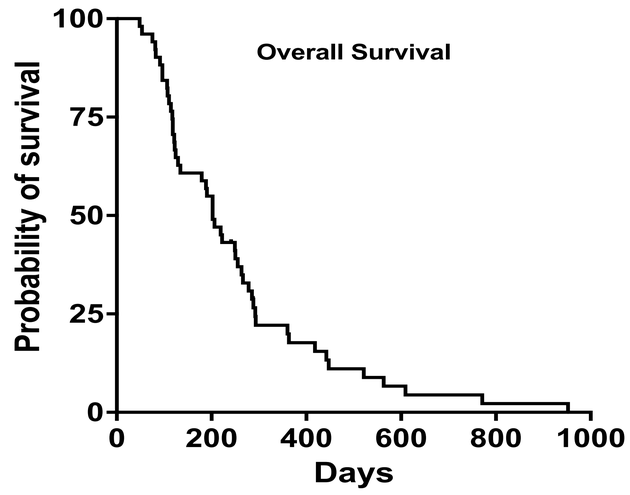


Figure 2: Kaplan Meier of overall survival (OS) for CRPC patients treated with Carboplatin monotherapy.

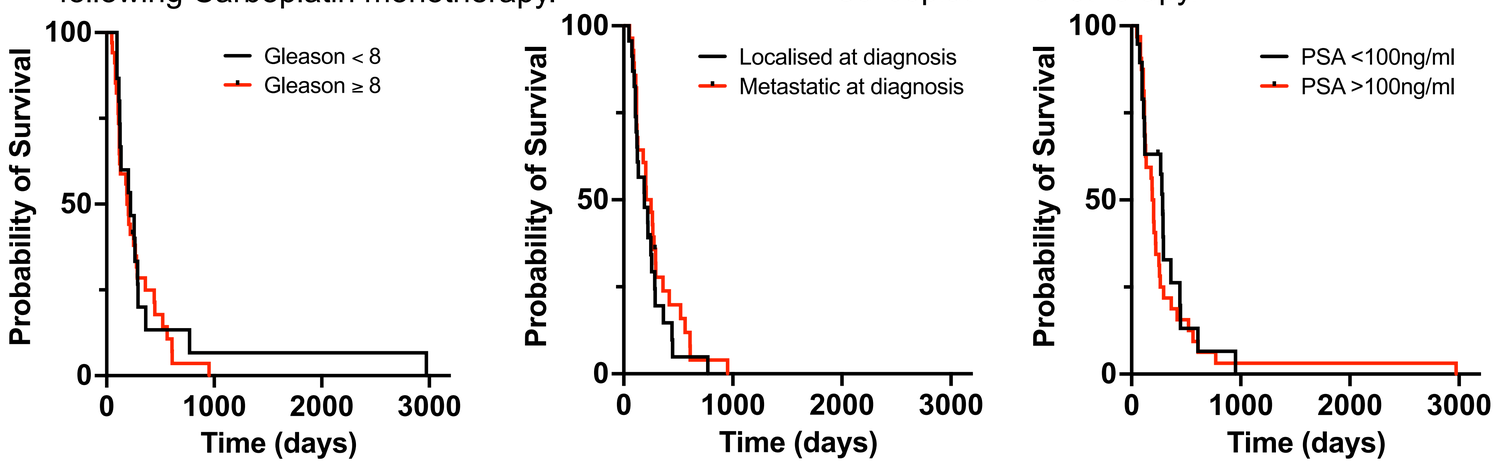


Figure 3: Exploration of factors that may impact overall survival with Carboplatin monotherapy. Overall survival (OS) stratified by (**A**) Gleason score at diagnosis (p=0.57), (**B**) Localised vs metastatic disease at diagnosis (p=0.32) and (**C**) PSA when starting Carboplatin (PSA <100ng/ml vs PSA>100ng/ml at Carboplatin commencement (p=0.47).

Treatment information: Most patients received Carboplatin AUC 5mg carboplatin/mL/min at 3-weekly intervals. Median number of cycles of Carboplatin was 3 (range 1-17). Median time on treatment 63 days (range 1-441).

Response data: 6 (11.8%) patients had a PSA response ≥50% (**Fig. 1**). Median time to PSA progression (as defined by PCWG[2]) on Carboplatin was 67 days (range 15-418). 16 patients (31%) required a dose reduction/delay. 8 patients (15.6%) ceased Carboplatin secondary to side effects/ toxicity. Median overall survival (OS) was 29.4 weeks (IQR 11.7 weeks) (**Fig. 2**).

Predictive value: There was no significant difference in OS in patients with metastatic disease, higher gleason score at diagnosis or in those with a higher PSA prior to starting Carboplatin (**Fig. 3**).

CONCLUSION

In a minority of heavily pre-treated advanced prostate cancer patients, Carboplatin has a modest benefit with relatively low rates of toxicity.

References:

1. Gillessen S, Attard G, Beer TM, Beltran H, Bossi A, Bristow R, et al. Management of Patients with Advanced Prostate Cancer: The Report of the Advanced Prostate Cancer Consensus Conference APCCC 2017. Eur Urol. 2018;73(2):178-211
2. Scher HI, Morris MJ, Stadler WM, Higano CS, Halabi S, Smith MR, et al. The Prostate Cancer Working Group 3 (PCWG3) consensus for trials in castration-resistant prostate cancer (CRPC). Journal of Clinical Oncology. 2015;33(15_suppl):5000.

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