Improved Survival in PSA-Responders vs. Non-responders After Steroid Switch in Castration-Resistant Prostate Cancer

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INTRODUCTION

Abiraterone acetate with prednisone is a standard treatment for metastatic castrate-resistant prostate cancer (mCRPC). However, there is some evidence demonstrating a prostate specific antigen (PSA) response and improved progression-free survival with dexamethasone compared with prednisolone. Our objective is to evaluate PSA response after steroid switch from prednisone to dexamethasone in men with mCRPC progressing on abiraterone.

METHODS

Retrospective electronic medical record review and analysis of all men with mCRPC on abiraterone who were switched from prednisone to dexamethasone presenting to the Vanderbilt Comprehensive Prostate Cancer Clinic from 2012-2019 was performed. Demographic, pathologic, and survival information were obtained per IRB-protocol. Percentage of PSA change, time to PSA progression, and median overall survival (OS) after switch from prednisone to dexamethasone was calculated.

Table 1. Demographics and clinical characteristics

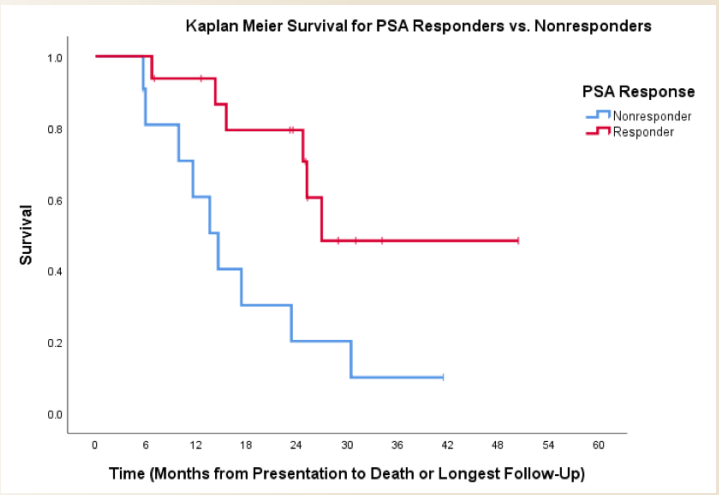
N	27
Median Age (years), (IQR)	67.9 (63.4, 75.9)
Age in years, *N* (%)	
<60	5 (18.5)
60-70	11 (40.7)
70-80	7 (25.9)
>80	4 (14.8)
PSA at time of steroid switch, median (IQR)	17.4 (8.8, 50.1)
Follow Up (months) median*, (IQR)	23.2 (12.1, 26.1)
Race, *N* (%)	
White	25 (92.5)
African American	1 (3.7)
Latino	0
Native American	1 (3.7)
Median BMI (kg/m2)	29.5
CCI, *N* (%)	
0 to 2	9 (33.3)
3 to 5	4 (14.8)
>5	14 (51.8)
Prior localized prostate cancer treatment, *N* (%)	
Radical prostatectomy	6 (22.2)
Radiation +/- ADT	3 (11.1)
Radical prostatectomy + Radiation +/- ADT	13 (48.1)
None or systemic therapy *(metastatic at time of diagnosis)*	5 (18.5)
Initial CRPC treatment, *N* (%)	
Enzalutamide	14 (51.8)
Bicalutamide	6 (22.2)
Sipuleucel-T	5 (18.5)
Lupron	1 (3.7)
Docetaxel	1 (3.7)
Clinical State, *N* (%)	
Non-metastatic, Castrate Resistant	23 (85.1)
Metastatic, Castrate Resistant	4 (14.8)
Alive, N (%)	12 (44.4)
Deceased, N (%)	15 (55.5)

*Time to death or most recent follow up

RESULTS

Of 27 men with mCRPC on abiraterone who underwent steroid switch from prednisone to dexamethasone, PSA decreased in 16 (59.2%) over a median follow up of 23.2 months. Median time to PSA progression on abiraterone acetate and dexamethasone was 4.0 months. One patient has not yet experienced PSA progression 24.1 months after switch. Median OS in all patients was 25.1 months.

There were no significant differences between PSA responders and non-responders in age, race, BMI, CCI, and PSA at time of steroid switch. Men with mCRPC progressing on abiraterone with a PSA response after steroid switch had significantly better OS than men without a PSA response after steroid switch (34.9 vs 17.5 months, p=0.011).



CONCLUSIONS

Switching from prednisone to dexamethasone results in a PSA response in approximately half of men with mCRPC progressing on abiraterone. Men with a PSA response after steroid switch have better OS than those do not have a PSA response.

References

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