

UC San Diego

RACE DOES NOT PREDICT SKELETAL-RELATED EVENTS AND ALL-CAUSE MORTALITY IN MEN WITH CASTRATION-RESISTANT PROSTATE CANCER

MAY 7, 2020

Devin N. Patel, MD, MBA
Urologic Oncology Fellow

Introduction

- Black men are more likely to be diagnosed with more aggressive forms of prostate cancer and are more likely to die of prostate cancer than men of other races
- Although at the time of diagnosis, it is well established that black men have a greater incidence of aggressive disease, the patterns of survival in patients with later stage disease remain understudied
- Limited data have suggested that among men with advanced forms of prostate cancer, survival outcomes among black men are similar to/better than those among white men

Introduction

- In addition to the question of survival, to our knowledge the impact of race on bone health in patients with advanced prostate cancer is unknown.
- A decreased rate of osteoporosis and fracture risk in black patients has been well established
- We studied the impact of race on SREs and overall survival among men with bone mCRPC
- We hypothesized that race would not have adverse prognostic significance for SREs or overall survival

Materials and Methods

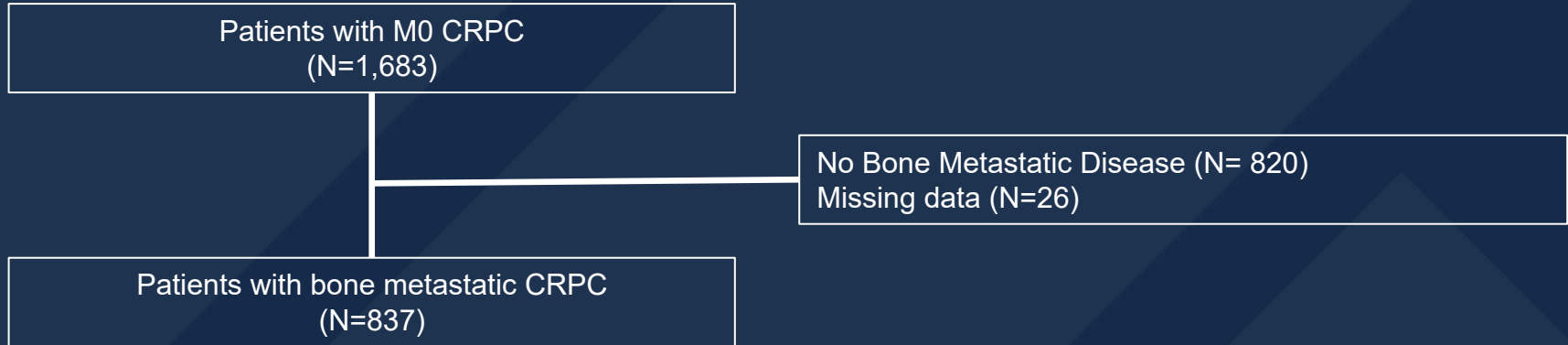
- **Primary Outcome:** Time from bone mCRPC to Skeletal Related Events (SRE)
 - Pathologic fracture, spinal cord compression, radiotherapy to the bone, or surgery to the bone
- **Secondary Outcome:** Time from bone mCRPC to death



Materials and Methods

- Multivariable analysis with adjustment for:
 - Age, Year
 - PSA/PSADT
 - Primary treatment (none vs RP ± XRT vs XRT alone)
 - Number of bone metastases
 - Bone pain
 - Concomitant visceral or lymph node metastases
 - Months from ADT to m0CRPC
 - Months from m0CRPC to mCRPC

Results: CONSORT Diagram

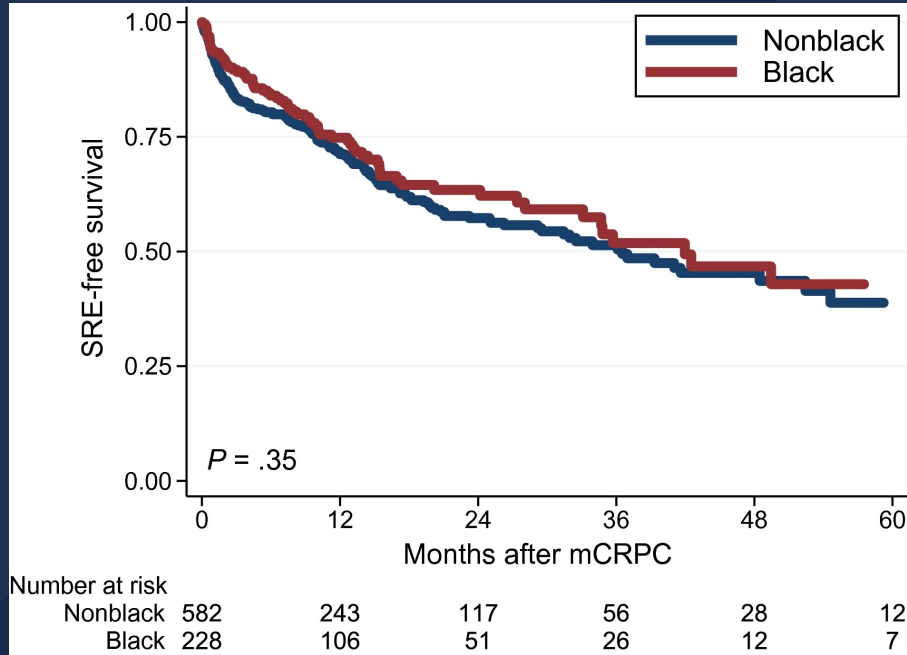


Results: Selected Baseline Characteristics

Variable	Black (n = 232)	Non-Black (n=605)	Total
Number of Bone Metastases			
1	23%	26%	25%
2	14%	16%	16%
3-9	33%	38%	37%
≥ 10	29%	19%	22%
PSA at Metastases	41.7 ng/ml	29.2 ng/ml	31.5 ng/ml

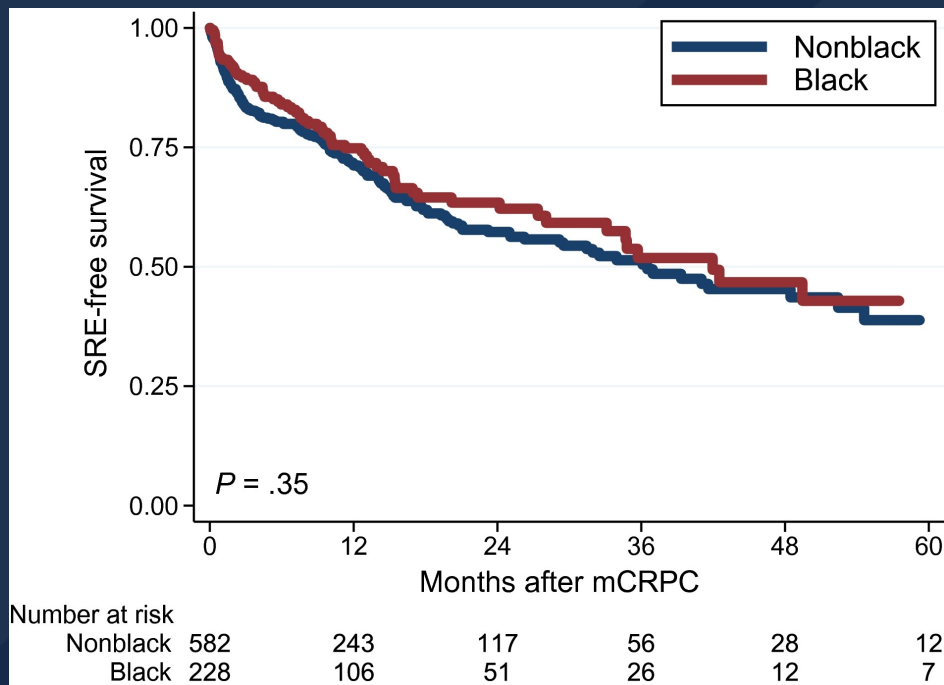
- No Difference in:
- Age
- Year
- Grade
- Primary treatment
- LN metastases
- PSADT
- Time from ADT to CRPC
- Time to metastases
- Bone pain

Results: SREs (Primary Outcome)



Variable	HR	95% CI	p
Non-Black	Ref	Ref	Ref
Black	0.80	0.59-1.07	.13

Results: Overall Survival (Secondary Outcome)



Variable	HR	95% CI	p
Non-Black	Ref	Ref	Ref
Black	0.87	0.73-1.04	.13

Conclusions

- At time of metastases, African American patients had a higher PSA and higher number of bone metastases
- Despite this, we found that black men with bone mCRPC had no increased risk of SREs compared with nonblack men
- In addition, we found no difference in survival between black and nonblack men with bone mCRPC
- These current data suggest that race does not have a negative prognostic effect in patients with mCRPC

UC San Diego