IDC-P positive and non-IDC-P patients, respectively, but not vice versa. Patients with higher HRD scores seemed to progress faster with standard treatment (11.3 months vs. 28.0 months, \(P=0.077\)). M1, high Gleason score, and IDC-P pathology represent higher HRD scores in PCa.

CONCLUSIONS: Tumors with IDC-P might have different driven mechanisms for high HRD scores than non-IDC-P. Alternative treatment should be considered for PCa patients with high HRD scores.

PD35-10
PROGNOSTIC SIGNIFICANCE OF RISK STRATIFICATION IN CHAARTED AND LATITUDE STUDIES AMONG JAPANESE MEN WITH CASTRATION-RESISTANT PROSTATE CANCER
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INTRODUCTION AND OBJECTIVE: The CHAARTED and LATITUDE trials demonstrated a survival benefit of docetaxel and abiraterone for hormone-sensitive prostate cancer. In this study, we examined the impact of the risk stratification criteria used in the CHAARTED and LATITUDE trials on the prognosis of castration-resistant prostate cancer (CRPC). We also tested whether these risk stratification criteria could help in selecting effective initial treatment for CRPC.

METHODS: Japanese patients with CRPC who were treated with docetaxel or androgen receptor pathway inhibitors such as abiraterone acetate or enzalutamide between 2014 and 2018 were included in this study. Clinicopathological factors, progression-free survival, and overall survival were investigated.

RESULTS: Of 215 patients, 110 men (51.2%) and 93 men (43.3%) were grouped as high volume by CHAARTED criteria and high risk by LATITUDE criteria, respectively. Median progression-free survival was 10.3/4.5 months (\(P<0.0001\)) for low/high volume (CHAARTED criteria) and 9.9/4.8 months (\(P=0.0032\)) for low/high risk (LATITUDE criteria). The median overall survival was 44.8/17.4 months (\(P<0.0001\)) for low/high volume (CHAARTED criteria) and 37.4/17.4 months (\(P=0.0011\)) for low/high risk (LATITUDE criteria). The prognostic impact of CHAARTED and LATITUDE criteria was comparable between androgen receptor pathway inhibitors and docetaxel as first-line treatment for CRPC.

CONCLUSIONS: The CHAARTED and LATITUDE criteria were prognostic, but not predictive factors for CRPC.

Source of Funding: None

PD35-11
THE IMPACT OF OLDER AGE ON THE ONCOLOGICAL OUTCOMES FOR HIGH-RISK METASTATIC HORMONE-SENSITIVE PROSTATE CANCER TREATED WITH UPFRONT INTENSIVE THERAPY
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INTRODUCTION AND OBJECTIVE: The impact of older age on the prognosis for high-risk metastatic hormone-sensitive prostate cancer treated with upfront intensive therapy remains unclear. We aimed to assess the impact of older age (75 years or older) on oncological outcomes in patients with CHAARTED high-volume metastatic castration-sensitive prostate cancer between patients with
androgen deprivation therapy (ADT) plus upfront docetaxel (DTX) or abiraterone acetate (ABI) plus prednisolone and vintage therapy (ADT monotherapy or combined androgen blockade).

METHODS: This multicenter retrospective study included 294 and 521 patients in the upfront group (DTX: 95 and ABI: 199 patients) and in the vintage group (ADT monotherapy), respectively. Of 815, we identified 304 patients aged 75 years or older. We compared castration-resistant prostate cancer-free survival (CRPC-FS) and overall survival (OS) between the upfront and vintage groups. Multivariable Cox regression analysis was performed to access the effect of upfront intensive therapy on prognosis in the older age population.

RESULTS: Of 304, we identified 102 and 202 patients in the upfront group (DTX: 27 and ABI: 75 patients and in the vintage group, respectively. The proportion of older patients were 35% (n = 102/294) in the upfront group and 39 (n = 202/521) in the vintage group. In the older patients, the upfront group had significantly prolonged CRPC-FS and OS compared with the vintage group. CRPC-FS were significantly longer in patients with upfront ABI therapy than those with upfront DTX therapy, but OS was not significantly different between the upfront ABI and DTX therapies. Multivariable Cox regression analysis showed the upfront group was significantly prolonged CRPC-FS and OS.

CONCLUSIONS: The upfront intensive therapy significantly prolonged CRPC-FS and OS compared with the vintage therapy in the older population in real-world patients.

PD35-12
ASSOCIATION BETWEEN USE OF SECOND-GENERATION ANTIANDROGENS AND OVERALL SURVIVAL IN PATIENTS WITH METASTATIC PROSTATE CANCER – A POPULATION-BASED STUDY
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INTRODUCTION AND OBJECTIVE: Our previous study found a marginal survival improvement among patients diagnosed with metastatic prostate cancer (PCa) in the second-generation antiandrogen (SGA) era. When stratified by stage, only men with bone and visceral metastasis (M1b and M1c) experienced a statistically significant improvement in survival. We tested the hypothesis that use of SGAs is associated with selective survival among M1b and M1c patients only.

METHODS: The study was composed of patients with newly diagnosed metastatic PCa identified from the Surveillance, Epidemiology, and End Results (SEER)-Medicare Linked Database. The primary outcome was overall survival (OS). Patients were classified to the pre-SGA era if diagnosed in 2004-2010 and post-SGA era if diagnosed in 2011-2016. We analyzed the association between use of SGA and overall survival by the Kaplan-Meier method, log-rank test, and Cox proportional hazards model.

RESULTS: This study was composed of 7,791 patients (median age 76.73). Median OS improved by 2 months from 27.17 to 29.44 months in M1b patients (p = 0.01) but did not significantly change in M1a and M1c patients (p = 0.99 and p = 0.77, respectively; Figure 1). Use of SGAs was uniformly distributed across M1a, M1b, and M1c patients (p = 0.52; Table 1). In the post-SGA era, SGA use was significantly associated with increased OS among M1b patients only (hazard ratio 0.78; 95% CI 0.68-0.89) but not M1a and M1c patients (p = 0.20 and p = 0.32, respectively; Table 2).

CONCLUSIONS: Since the advent of SGAs in 2011, there has been a marginal overall survival improvement in patients with metastatic PCa. Survival improvements from SGAs were observed in M1b patients only. Further investigation is warranted.

Source of Funding: None

Table 1. Distribution of SG-ARI use by stage in patients diagnosed in 2011 - 2016

| Stage | % (not taking SG-ARIs) | % (taking SG-ARIs) |
|-------|------------------------|--------------------|
| M1a   | 80 (63.49)             | 46 (36.51)         |
| M1b   | 1.14 (0.20)            | 5.28 (0.81)        |
| M1c   | 265 (67.95)            | 125 (32.05)        |

Table 2. Cox proportional hazards model of overall survival and PCa-specific survival for metastatic prostate cancer patients taking SG-ARIs in 2011-2016 by stage (reference group: patients not taking SG-ARIs)

| Survival | Stage | HR (95% CI) | p-value | Adjusted HR (95% CI) | p-value |
|----------|-------|-------------|---------|----------------------|---------|
| Overall  | M1a   | 1.41 (0.83-2.37) | 0.20 | 1.12 (0.30-4.24) | 0.86 |
|          | M1b   | 0.78 (0.38-1.65) | 0.65 | 0.82 (0.37-1.83) | 0.26 |
|          | M1c   | 0.88 (0.57-1.34) | 0.05 | 1.00 (0.60-1.68) | 0.95 |
| Predosc  |       |              |         |                      |         |
|          | M1a   | 1.47 (0.65-3.35) | 0.78 | 1.25 (0.60-2.66) | 0.50 |
|          | M1b   | 0.73 (0.14-3.82) | 0.67 | 0.75 (0.32-1.87) | 0.50 |
|          | M1c   | 1.08 (0.37-3.35) | 0.93 | 1.04 (0.36-3.30) | 0.93 |

*Adjusted for age, race, ethnicity, Charlson comorbidity index, marital status, Medicare beneficiary status, region, income of residence area, education of residence area, treatment, PSA, and Gleason score

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