Poster SA5

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Real-World Treatment Patterns and Treatment Intensification in Metastatic Hormone-Sensitive Prostate Cancer by Disease Volume and Presentation

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KEY FINDINGS & CONCLUSIONS

- Patients with mHSPC demonstrate heterogeneous treatment patterns by disease volume and disease presentation
  - The highest use of triplet therapy was among patients with HVD, while the highest use of ADT monotherapy was among patients with LVD
  - Treatment intensification (defined in this study as adding docetaxel, ARPI, or radiation >120 days after their initial treatment regimen) was observed in 13.5% of patients overall and was highest in patients with HVD (21.5%)
- Despite increased use of ADT + ARPI and triplet therapy over time, 31.7% of patients still initiated ADT monotherapy, and only 28.0% of these patients underwent subsequent treatment intensification
  - The use of ADT monotherapy in these patients may be a reflection of undertreatment but may also be due to various patient factors not fully captured in this real-world claims-based dataset, including access to treatment and treatment selection considerations
- Overall, these results suggest potential gaps between treatment guidelines and real-world practice

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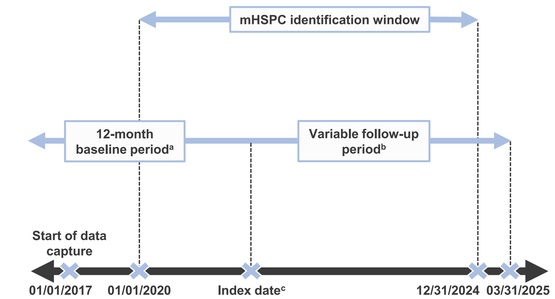
INTRODUCTION

- Prostate cancer (PC) is the second most common cancer in men and the fifth leading cause of cancer death among men worldwide, with the incidence expected to increase[1–3]
- The treatment landscape for metastatic hormone-sensitive prostate cancer (mHSPC) has expanded significantly, with guidelines recommending combination therapy, including the use of doublet therapy consisting of androgen deprivation therapy (ADT) + androgen receptor pathway inhibitors (ARPIs) or ADT + taxanes and triplet therapy consisting of ADT + docetaxel + ARPIs[3,4]
- The aim of this study was to examine real-world treatment patterns and treatment intensification in patients diagnosed with mHSPC

METHODS

- This retrospective, non-interventional cohort study used data from PharMetrics® Plus, a fully adjudicated administrative claims database, from 01/01/2017 to 03/31/2025
- Adult males with newly diagnosed mHSPC treated with ADT between 01/01/2020 and 12/31/2024 were included (**Figure 1**)
  - The index date was the date of ADT initiation
- Treatment intensification was defined as adding docetaxel, ARPI, or radiation >120 days after treatment initiation
  - Switching from one doublet to another or adding radiation to an initial doublet therapy was not considered treatment intensification
  - ARPIs included abiraterone, enzalutamide, apalutamide, and darolutamide
- Patients were assessed overall and stratified by disease volume and presentation (*de novo* vs recurrent)
  - High-volume disease (HVD) was defined using claims-based proxies, including receipt of chemotherapy during the post-index period or having ≥1 visceral metastasis
  - Low-volume disease (LVD) was defined as patients who did not meet the HVD criteria
  - *De novo* disease was defined as patients diagnosed with metastatic disease after the initial PC diagnosis, with no evidence of localized PC treatments
  - Recurrent disease was defined as patients diagnosed with metastatic disease after localized PC treatments (including radical prostatectomy, external beam radiation therapy, or surgical/medical castration)
- Study endpoints included initial therapy received, treatment intensification, and time to treatment intensification
  - Patients were followed from index until progression, death, loss to follow-up, or the end of the study period

Figure 1. Study design



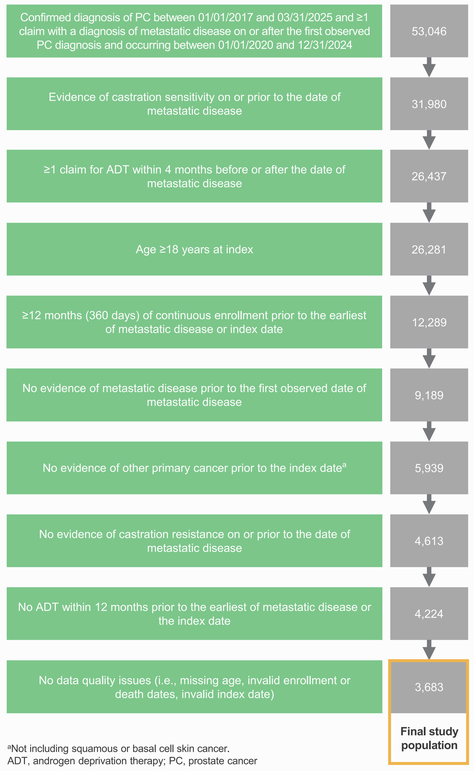
[a]No evidence of mHSPC/mCRPC. Data collected included demographics and clinical characteristics. [b]Data collected during the post-index period included initial mHSPC treatment and treatment intensification. [c]The index date was the date of ADT initiation and occurred within 4 months of mHSPC diagnosis.
ADT, androgen deprivation therapy; mCRPC, metastatic castration-resistant prostate cancer; mHSPC, metastatic hormone-sensitive prostate cancer.

RESULTS

Patient characteristics

- Patient attrition is shown in **Figure 2**
- Overall, 3,683 patients were included in the study
- Patient characteristics are shown in **Table 1**
  - Overall, 58.3% and 41.7% of patients had *de novo* and recurrent disease, respectively, and 71.0% and 29.0% had LVD and HVD, respectively
  - When considering the entire mHSPC disease state, medical oncologists were the most common treating physician (44.7%), followed by urologists (38.5%)

Figure 2. Patient attrition



[a]Not including squamous or basal cell skin cancer.
ADT, androgen deprivation therapy; PC, prostate cancer

Table 1. Patient characteristics

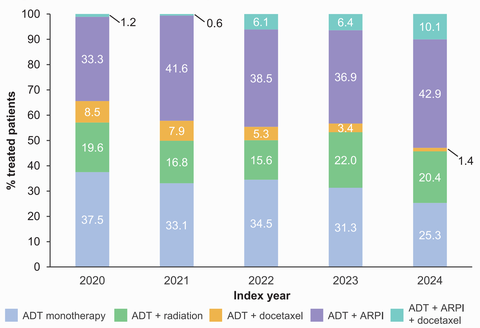
Characteristic	Overall cohort N=3,683	Disease presentation: *De novo* n=2,148	Disease presentation: Recurrent n=1,535	Disease volume: LVD n=2,614	Disease volume: HVD n=1,069
Mean age, years (SD)	70.3 (9.3)	71.1 (9.2)	69.2 (9.3)	70.6 (9.3)	69.7 (9.4)
Age group, n (%)					
18–54	139 (3.8)	56 (2.6)	83 (5.4)	89 (3.4)	50 (4.7)
55–64	944 (25.6)	505 (23.5)	439 (28.6)	651 (24.9)	293 (27.4)
65+	2,600 (70.6)	1,587 (73.9)	1,013 (66.0)	1,874 (71.7)	726 (67.9)
Geographic region, n (%)					
Northeast	837 (22.7)	505 (23.5)	332 (21.6)	579 (22.1)	258 (24.1)
Midwest	1,491 (40.5)	854 (39.8)	637 (41.5)	1,056 (40.4)	435 (40.7)
South	790 (21.4)	452 (21.0)	338 (22.0)	555 (21.2)	235 (22.0)
West	565 (15.3)	337 (15.7)	228 (14.9)	424 (16.2)	141 (13.2)
Physician specialty, n (%)					
Urology	1,418 (38.5)	642 (29.9)	776 (50.6)	1,043 (39.9)	375 (35.1)
Medical oncology	1,646 (44.7)	1,161 (54.1)	485 (31.6)	1,089 (41.7)	557 (52.1)
Other/unknown specialty	619 (16.8)	345 (16.1)	274 (17.9)	482 (18.4)	137 (12.8)
Payer type, n (%)					
Commercial/ self-insured	1,326 (36.0)	694 (32.3)	632 (41.2)	931 (35.6)	395 (37.0)
Managed Medicaid	348 (9.4)	223 (10.4)	125 (8.1)	234 (9.0)	114 (10.7)
Medicare Advantage	1,993 (54.1)	1,221 (56.8)	772 (50.3)	1,434 (54.9)	559 (52.3)
Other/ unknown	16 (0.4)	10 (0.5)	6 (0.4)	15 (0.6)	1 (0.1)

HVD, high-volume disease; LVD, low-volume disease; SD, standard deviation.

Use of initial therapies over time

- Overall, use of ADT monotherapy as initial treatment decreased from 37.5% in 2020 to 25.3% in 2024; ADT + docetaxel decreased from 8.5% to 1.4%, respectively (**Figure 3**)
- ADT + ARPI as initial treatment increased from 33.3% to 42.9% from 2020 to 2024, and ADT + ARPI + docetaxel increased from 1.2% to 10.1%, respectively

Figure 3. Use of initial therapies over time in the overall cohort

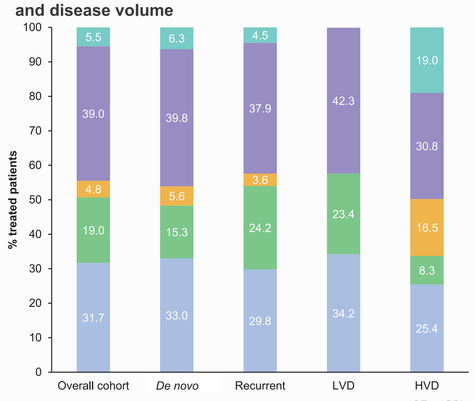


ADT, androgen deprivation therapy; ARPI, androgen receptor pathway inhibitor.

Initial therapy by disease volume and disease presentation

- Overall, ADT monotherapy was used as the initial treatment in 31.7% of patients
- ADT + ARPI doublet therapy was the most common initial therapy, with the highest proportion among patients with LVD (42.3%)
  - Triplet therapy was used most among patients with HVD (19.0%)

Figure 4. Use of initial therapies by disease presentation and disease volume



ADT, androgen deprivation therapy; ARPI, androgen receptor pathway inhibitor; HVD, high-volume disease; LVD, low-volume disease.

Treatment intensification

- Overall, 13.5% of patients had treatment intensification following their initial therapy
  - 28.0% of patients on ADT monotherapy as their initial therapy underwent treatment intensification
- Patients with HVD were most likely to have treatment intensification (21.5%) while patients with LVD were least likely to have treatment intensification (10.3%) (**Table 2**)

Table 2: Treatment intensification during follow-up[a]

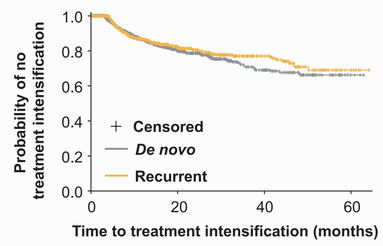
Treatment pattern outcomes observed during follow-up[b]	Overall cohort N=3,683	Disease presentation: *De novo* N=2,148	Disease presentation: Recurrent N=1,535	Disease volume: LVD N=2,614	Disease volume: HVD N=1,069
Treatment intensification, n (%)	498 (13.5)	284 (13.2)	214 (13.9)	268 (10.3)	230 (21.5)

[a]Treatment intensification was defined as adding docetaxel, ARPI, or radiation >120 days after treatment initiation. [b]Patients censored at disease progression, end of continuous enrollment or death.
ARPI, androgen receptor pathway inhibitor; HVD, high disease volume; LVD, low disease volume.

Time to treatment intensification by disease presentation and disease volume

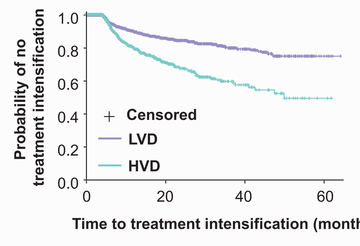
- The median time to treatment intensification was not reached for either the *de novo* group or the recurrent disease group
  - At 36 months, 71% of patients with *de novo* and 77% with recurrent disease did not have treatment intensification (**Figure 5**)
- The median time to treatment intensification was 50.0 (41.1–not reached) months for patients with HVD and was not reached for patients with LVD
  - At 36 months, 60% of patients with HVD and 80% with LVD did not have treatment intensification (**Figure 6**)

Figure 5. Time to treatment intensification by disease presentation[a,b]



[a]This analysis includes all patients and depicts the time from the index date to date of treatment intensification (i.e., change from mono to doublet/triplet or doublet to triplet therapy). Patients were considered to have experienced the outcome if they progressed from ADT monotherapy to a doublet/triplet therapy or from a doublet to triplet therapy. Patients who did not have the outcome were censored at last follow-up (earliest of mCRPC diagnosis, end of continuous enrollment, or death). [b]Median follow-up was 28 months for *de novo* and 30 months for recurrent disease presentation.
ADT, androgen deprivation therapy; mCPRC, metastatic castration-resistant prostate cancer.

Figure 6. Time to treatment intensification by disease volume[a,b]



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HVD, high-volume disease; LVD, low-volume disease; mCPRC, metastatic castration-resistant prostate cancer.

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Disclosures

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