Androgen Deprivation Therapy Practice Patterns in High-Risk Prostate Cancer Treated With Definitive Radiotherapy: Prospective Results From a Statewide Quality Consortium

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ABSTRACT

PURPOSE The 2022 AUA/ASTRO guidelines recommend 18-36 months of androgen deprivation therapy (ADT) with definitive radiotherapy for localized, high-risk prostate cancer. The STAMPEDE M0 trial supports intensification with androgen receptor pathway inhibitors (ARPIs) for patients with ≥2 cT3/T4, Grade Group [GG] 4-5, prostate-specific antigen (PSA) ≥40 ng/mL, or cN1. Given advances in imaging, risk stratification, and treatment delivery, we characterized contemporary practice patterns using prospective data from the Michigan Radiation Oncology Quality Consortium (MROQC).

METHODS Patients enrolled in MROQC with intact, high-risk M0/N0-1 prostate cancer were included. Clinical information, including intended ADT duration and ARPI use, was prospectively collected. The primary outcome was intended guideline-concordant ADT (GC-ADT, ≥18 months). Multivariable analyses (MVA) assessed associations between clinical factors and GC-ADT recommendations. We compared the adoption of ARPI with standard therapies before and after the publication of STAMPEDE M0. Facility-level variability was evaluated using a mixed-effects model, with the treatment site as a random intercept.

RESULTS Between June 2020 and November 2024, 553 patients across 26 centers were included: cT3/4 (13.3%), cN1 (19.9%), GG 4-5 (75.0%), and PSA ≥20 ng/mL (40.0%). Overall, 91.3% were recommended ADT, with 67.0% being guideline-concordant. On MVA, GC-ADT was significantly associated with cN1 (odds ratio [OR], 2.94 [95% CI, 1.44 to 5.99]), GG (GG4 OR, 6.23 [95% CI, 2.85 to 13.62]; GG5 OR, 9.45 [95% CI, 4.46 to 20.06]), and PSA ≥40 (OR, 3.64 [95% CI, 1.22–10.87]). Facility-level variability persisted in the MVA ($P < .0001$). Among the 27.9% who met meeting STAMPEDE criteria, ARPI recommendations increased from 0% prepublication to 23.2% afterward.

CONCLUSION Within a statewide quality consortium, guideline-concordant ADT recommendations occurred in two thirds of patients, with ARPI intensification in under 25% among STAMPEDE-eligible patients. These findings highlight the need for individualized ADT strategies and collaborative efforts to standardize high-quality care.

ACCOMPANYING CONTENT

Appendix

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INTRODUCTION

For patients with high-risk prostate cancer treated with curative-intent radiotherapy (RT), 18-36 months of androgen deprivation therapy (ADT) improves overall survival compared with radiation alone or radiation with 4-6 months of androgen deprivation therapy (short term [ST]-ADT).[1-4] The survival benefit of long-term ADT was confirmed in an individual patient-level meta-analysis of randomized trial data demonstrating the greatest benefit from extending the adjuvant ADT component.[5] Moreover, the oncologic benefit of ADT remains significant even with radiation dose escalation.[2,6] These data support the 2022 AUA/ASTRO guidelines that recommend 18-36 months of ADT for this patient population.[7] In addition, for men with very high-risk disease, defined as two or three risk features (cT3-4,

CONTEXT

Key Objective

Using contemporary prospective data, how frequently and consistently are providers recommending first-generation androgen deprivation therapy (ADT) and next-generation androgen receptor pathway inhibitors (ARPIs) for patients with high-risk prostate cancer treated with curative-intent radiotherapy?

Knowledge Generated

Although approximately 90% of patients were recommended to receive at least some duration of first-generation ADT, only two thirds were of a guideline-concordant duration (≥18 months). Facility-level heterogeneity in practice patterns persisted after adjustment for clinical risk factors. Despite contemporary evidence supporting ARPIs for certain patients with high-risk nonmetastatic disease, uptake remained modest, with only <25% of eligible patients recommended an ARPI.

Relevance

Within a statewide quality consortium, facility-level variability in ADT and ARPI recommendations highlights the need for data supporting individualized treatment strategies in high-risk prostate cancer and collaborative efforts to ensure delivery of guideline-concordant, high-quality care.

grade group [GG] 4-5, or prostate-specific antigen [PSA] ≥40 ng/mL) or clinical node positivity (cN1) on conventional imaging, addition of abiraterone, an androgen receptor pathway inhibitor (ARPI), and prednisone to radiation and ADT leads to improved metastasis-free survival and overall survival.[8]

Clinicians and patients must also balance oncologic benefits against numerous adverse effects of ADT including bone loss, hot flashes, metabolic changes, muscle loss, sexual side effects, and a possibility of increased cardiovascular events.[9] Evidence suggests that the risk of exacerbating pre-existing comorbidities may outweigh the oncologic benefits in some patients with a significant personal cardiovascular history.[10,11] ARPIs also come at the cost of additional adverse events, including grade 3 hypertension and liver damage,[8] which may limit use among patients with significant comorbidities.

Given the recent advances in staging, risk stratification, and radiation treatment, little is known about how these data are being interpreted and applied to clinical practice. Historic studies have shown that most patients with high-risk prostate cancer being treated with definitive RT do not receive long-term ADT.[12,13] Therefore, we sought to identify factors influencing intended ADT and ARPI use and practice heterogeneity in a modern cohort across the diverse practices of the Michigan Radiation Oncology Quality Consortium (MROQC).

METHODS

MROQC

MROQC is a multicenter, statewide collaborative quality initiative involving 26 academic and community practice sites, financially supported by the Blue Cross Blue Shield of Michigan. As a quality improvement initiative, it is exempt from institutional review board review. Approximately 60% of statewide radiation oncology volume is captured in MROQC. Prospectively collected data include deidentified patient-level demographic, clinical, treatment, and dosimetry data and oncologic- and patient-reported outcomes.

Data Elements and Patient Eligibility

Data elements included age, individual Charlson comorbidities,[14] tumor (T) and nodal (N) category, GG, PSA, and percent biopsy cores positive. In a sensitivity analysis, Charlson comorbidity score was replaced with the presence of cardiovascular comorbidities defined by one or more of myocardial infarction, congestive heart failure, peripheral vascular disease, cerebrovascular disease, or diabetes with organ damage (collectively, cardiovascular disease).

Eligible patients included those treated with definitive-intent RT for intact high-risk or clinically node-positive, defined as radiographic lymph node involvement on computed tomography (CT) or Magnetic Resonance Imaging (MRI), prostate cancer from June 9, 2020, to November 30, 2024. High-risk was defined as at least one of the following: clinical tumor category cT3-4, GG 4 or 5, or PSA ≥20. Patients with distant metastases were excluded. If patients were missing technical RT details (n = 49) or intended ADT duration (n = 28), they were also excluded from this analysis. Patients enrolled on a clinical trial (n = 60) were excluded as some trials dictated ADT duration and therefore do not represent standard practice.

Diagnostics and Therapeutic Treatments

STAR-CAP stage was calculated based on clinical factors.[15] Details on the use of advanced diagnostic modalities (MRI,

Prostate-Specific Membrane Antigen Positron Emission Tomography [PSMAPET]) were collected starting March 2021. RT technical details were also prospectively captured including radiation treatment delivery (external beam radiotherapy [EBRT] with brachytherapy *v* EBRT alone), elective nodal radiation (yes no), and treatment setting (academic *v* nonacademic).

Within the MROQC database, provider-intended first-generation ADT drug (leuprolide, goserelin, degarelix, bicalutamide, or relugolix) and duration (months) were prospectively recorded. Details on the intended use of ARPIs (abiraterone, enzalutamide, apalutamide, or darolutamide) were also collected. A survey was distributed to centers to identify the provider type responsible for ADT and ARPI prescription (radiation oncologists, medical oncologists, urologists, or mixed).

Outcome Measures and Statistical Analysis

The primary outcome was intended guideline-concordant ADT (≥18 months). Associations between guideline-concordant intended ADT and patient and tumor factors were evaluated using univariable analysis (UVA) and multivariable analysis (MVA). A stepwise procedure (*P* value threshold, .05) was used for variable selection. Facility-level variability was tested using a mixed-effects model, with the treatment site as a random intercept. Radiation treatment–related and provider-specialty variables were also evaluated for associations with guideline-concordant intended ADT.

Model performance was measured by calculating the AUC. A caterpillar plot displayed rates of guideline-concordant intended ADT, estimated using the mixed-effects model to calculate predicted probabilities for each patient as if treated at each site and by then averaging these probabilities across the cohort.

ARPI use was explored among patients meeting STAMPEDE criteria (≥2 cT3/T4, GG 4-5, PSA ≥40 ng/mL; or clinical N1 disease).[8] Rates were compared before (June 2020-December 2021) and after (January 2022-November 2024) the STAMPEDE publication. Chi-squared tests compared rates, with a significance threshold of $P < .05$. Analyses were performed using SAS 9.4.

RESULTS

In total, 553 patients were included (Table 1). The cohort was enriched for aggressive disease: 30% had GG 5 on biopsy, and 19.9% had radiographic lymph node involvement on CT or MRI. Nearly all patients (94.4%) received dose-escalated RT. Among those with data available after March 2021 (n = 525), 61.3% underwent MRI and 44.0% underwent PSMAPET for staging. ADT was most commonly prescribed by urologists (41.5%), followed by radiation oncologists (27.7%), medical oncologists (15.5%), or a combination of providers (14.5%).

Two thirds (67.1%) of patients were recommended guideline-concordant ADT (≥18 months), and 91.3% was recommended at least some duration of ADT (Appendix Table A1, online only). There was substantial facility-level variability, with guideline-concordant intended ADT use ranging from 20.0% to 100% across sites. At all facilities, at least 50% of patients were intended to receive ≥12 months of ADT (Fig 1). In UVA, higher GG and clinical node positivity were significantly associated with increased guideline-concordant ADT (Table 1).

In MVA, GG 4-5, PSA ≥40 ng/mL, and cN1 remained associated with guideline-concordant intended ADT (Table 2). The AUC for this model was 0.714 (95% CI, 0.669 to 0.760). Adding a random intercept to account for clustering by site demonstrated significant facility-level variability in the adjusted model ($P < .0001$), increasing the AUC to 0.861 (95% CI, 0.828 to 0.895). Figure 2 illustrates this variability, showing the predicted probability of intended ADT as if all patients in the cohort had been treated at each individual facility; probabilities ranged from 25.1% (95% CI, 13.2% to 42.4%) to 93.2% (95% CI, 78.8% to 98.1%). Most centers (22 of 26, 84.6%) had rates between 65% and 95%.

Neither age nor Charlson comorbidity index was associated with the use of guideline-concordant ADT. Similarly, replacing Charlson comorbidity index with cardiovascular disease (present in 19.9%) showed no significant associations on UVA or MVA.

When radiation treatment variables were considered in the MVA, GG, PSA ≥40 ng/mL, and cN1 remained significant (Table 3). Combination brachytherapy with EBRT, compared with EBRT alone, was initially associated with lower guideline-concordant intended ADT, but this was not significant after adjusting for site, with the AUC increasing from 0.739 (95% CI, 0.695 to 0.783) to 0.866 (95% CI, 0.833 to 0.899). Neither nodal RT nor provider specialty administering ADT was significantly associated with guideline-concordant intended ADT.

STAMPEDE M0/N1 criteria were met in 154 patients (27.9%), of whom 33 (21.4%) received an ARPI. ARPIs were prescribed most frequently by radiation oncologists (35.1%), followed by urologists (32.5%), medical oncologists (26.0%), and mixed providers (6.5%). Before the STAMPEDE publication, 0 of 12 eligible patients received ARPIs, whereas after the publication (January 2022 onward), 33 of 142 patients (23.2%) received an ARPI ($P = .0016$, Fig 3). In addition, seven of 416 patients (1.7%) who did not meet STAMPEDE M0 criteria also received an ARPI.

DISCUSSION

Our study demonstrates that within a modern cohort of patients with high-risk prostate cancer treated as part of a statewide quality consortium, there exists significant facility-level heterogeneity in the intended use of ADT when

TABLE 1. Univariable Analyses for Guideline-Concordant Androgen Deprivation Therapy (≥18 months)

Variable	All	ADT <18 months	ADT>=18 months	OR (95% CI)	*P*
No.	553	182	371		
Age, years, mean (median)	71.9 (72)	71.6 (72)	72.1 (72)		
Charlson comorbidity index, No. (%)					
0	290 (52.4)	98 (53.8)	192 (51.8)	Ref	Ref
1	143 (25.9)	49 (26.9)	94 (25.3)	0.98 (0.64 to 1.50)	.92
2+	120 (21.7)	35 (19.2)	85 (22.9)	1.24 (0.78 to 1.98)	.36
Cardiovascular disease,[a] No. (%)					
No	443 (80.1)	147 (80.8)	296 (79.8)	Ref	Ref
Yes	110 (19.9)	35 (19.2)	75 (20.2)	1.06 (0.68 to 1.68)	.79
GG, No. (%)					
1/2/3	138 (25.0)	78 (42.9)	60 (16.2)		
4	249 (45.0)	75 (41.2)	174 (46.9)	3.02 (1.96 to 4.66)	<.0001
5	166 (30.0)	29 (15.9)	137 (36.9)	6.14 (3.68 to 10.49)	<.0001
Positive cores, %, No. (%)					
<50	213 (38.5)	77 (42.3)	136 (36.7)	Ref	Ref
≥50	340 (61.5)	105 (57.7)	235 (63.3)	1.27 (0.88 to 1.82)	.2
Prostate-specific antigen, No. (%)					
≤19 ng/mL	332 (60.0)	99 (54.4)	233 (62.8)	Ref	Ref
20-39 ng/mL	147 (26.6)	64 (35.2)	83 (22.4)	0.55 (0.37 to 0.82)	.0037
≥40 ng/mL	74 (13.4)	19 (10.4)	55 (14.8)	1.23 (0.70 to 2.22)	.48
T stage, No. (%)					
Missing	11				
T1	345 (63.7)	111 (62.4)	234 (64.3)	Ref	Ref
T2	125 (23.1)	43 (24.2)	82 (22.5)	0.90 (0.59 to 1.40)	.65
T3/T4	72 (13.3)	24 (13.5)	48 (13.2)	0.95 (0.56 to 1.65)	.85
Node-positive,[b] No. (%)					
Missing	16				
No	430 (80.1)	157 (91.3)	273 (74.8)	Ref	Ref
Yes	107 (19.9)	15 (8.7)	92 (25.2)	3.53 (2.03 to 6.53)	<.0001
STAR-CAP stage, No. (%)					
Missing	40				
IC/IIA/IIB	116 (22.6)	41 (25.6)	75 (21.2)	Ref	Ref
IIC	162 (31.6)	56 (35.0)	106 (30.0)	1.03 (0.63 to 1.70)	.89
IIIA/IIIB/IIIC	235 (45.8)	63 (39.4)	172 (48.7)	1.49 (0.92 to 2.40)	.1
STAMPEDE M0-eligible,[c] No. (%)					
0	399 (72.2)	159 (87.4)	240 (64.7)	Ref	Ref
1	154 (27.9)	23 (12.6)	131 (35.3)	3.77 (2.36 to 6.27)	<.0001

Abbreviations: ADT, androgen deprivation therapy; GG, grade group; OR, odds ratio; ref, reference.

[a]Cerebrovascular disease, congestive heart failure, myocardial infarction, diabetes with organ failure, or peripheral vascular disease.

[b]Defined as radiographic lymph node involvement on computed tomography or magnetic resonance imaging.

[c]Clinically node-positive on computed tomography or magnetic resonance imaging OR at least two of the following: prostate-specific antigen >40, GG 4-5, cT3-4.

administered with curative-intent RT. While more than 90% of patients received at least some first-generation ADT, only approximately two thirds were recommended a guideline-concordant duration (≥18 months). Furthermore, although nearly one in four patients were potentially eligible for ARPI intensification, fewer than 25% of eligible patients were recommended an ARPI.

Encouragingly, the intended use of long-term ADT in MROQC exceeds rates observed in historical US cohorts. For example, only 32% of CAncer of the Prostate Risk Assessment (CAPRA) high-risk patients treated between 1990 and 2014 received any ADT.[16] From 2004 to 2007, long-term ADT was highest among patients with higher-risk tumor features, consistent with what was found in our study, although

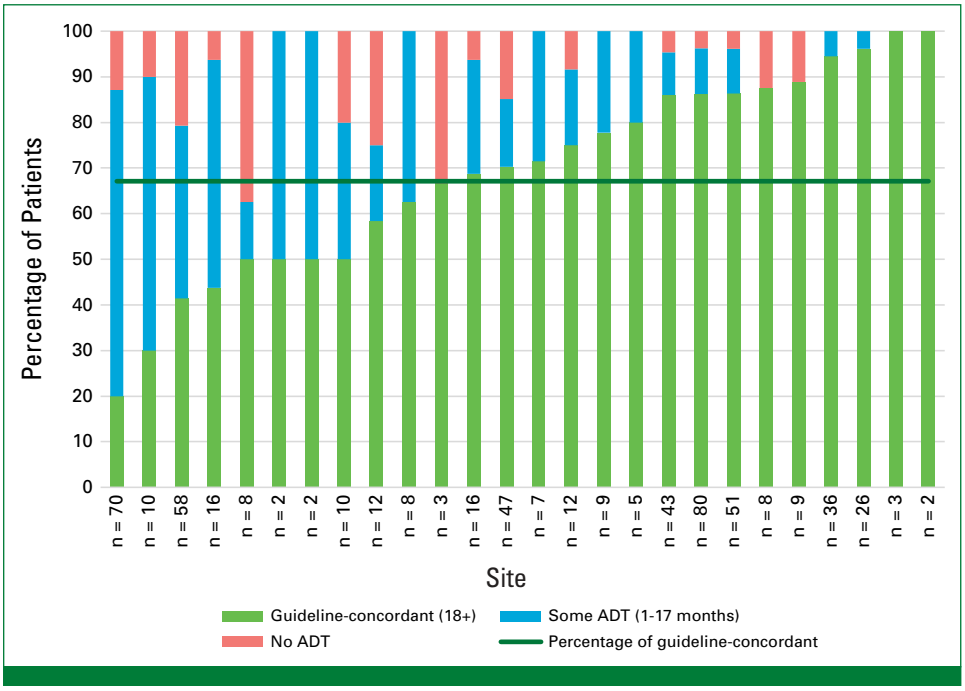

FIG 1. Facility-level variability ordered by the percentage of patients intended to receive guideline-concordant ADT. The gray line represents the guideline-concordant ADT percentage for the whole cohort. ADT, androgen deprivation therapy.

only 30.8% of the highest risk cohort (cT3b-T4 or primary Gleason 5) received long-term ADT.[12] A SEER database study of patients from 2008 to 2011 showed that only 13.1% received at least 24 months of ADT and 45.7% received at least 7 months.[17]

In the context of high-risk prostate cancer, providers and patients must weigh the risk of disease recurrence and mortality against the side effects of ADT treatment, highlighting the importance of personalized decision making. Advanced diagnostic modalities such as PSMA PET, as well as genomic classifier testing,[18,19] as is being tested in the phase III NRG GU-009 Predict trial (ClinicalTrials.gov identifier: NCT04513717), may assist in determining which patients benefit most from long-term ADT. Multivariable analysis in our study did not show that the total number of comorbidities nor specifically severe cardiovascular comorbidities was associated with long-term ADT use. This lack of association between comorbidities and ADT use has also been shown in studies of intermediate-risk prostate cancer[20,21] and illustrates the importance of integrated models considering both cancer risk and competing risks of other cause mortality to better inform treatment decision making.[22] These considerations are true within intermediate-risk disease as well where similar facility-level heterogeneity in intended ADT use is noted.[20]

TABLE 2. Multivariable Analyses of Guideline-Concordant Androgen Deprivation Therapy (≥18 months) Using Patient and Tumor Variables

	Without the Facility Level				With the Facility Level[a]			
Variable	OR	LCL[d]	UCL[e]	*P*	OR	LCL	UCL	*P*
GG 4 *v* 1/2/3	4.68	2.65	8.50	<.0001	6.08	2.81	13.16	<.0001
GG 5 *v* 1/2/3	7.56	3.97	14.89	<.0001	9.84	4.69	20.66	<.0001
PSA[b] 20-39 *v* ≤19	1.26	0.73	2.26	.42	1.72	0.85	3.46	.13
PSA 40+ *v* ≤19	2.54	1.27	5.35	.011	3.79	1.31	10.96	.014
Node-positive[c] *v* node-negative	3.02	1.68	5.77	.0004	2.66	1.32	5.36	.0064

Abbreviations: GG, grade group; LCL, lower confidence limit; OR, odds ratio; PSA, prostate-specific antigen; UCL, upper confidence limit.
[a]Mixed-effects model with the treatment site as a random intercept.
[b]PSA (ng/mL).
[c]Defined as radiographic lymph node involvement on computed tomography or magnetic resonance imaging.
[d]lower confidence limit.
[e]upper confidence limit.

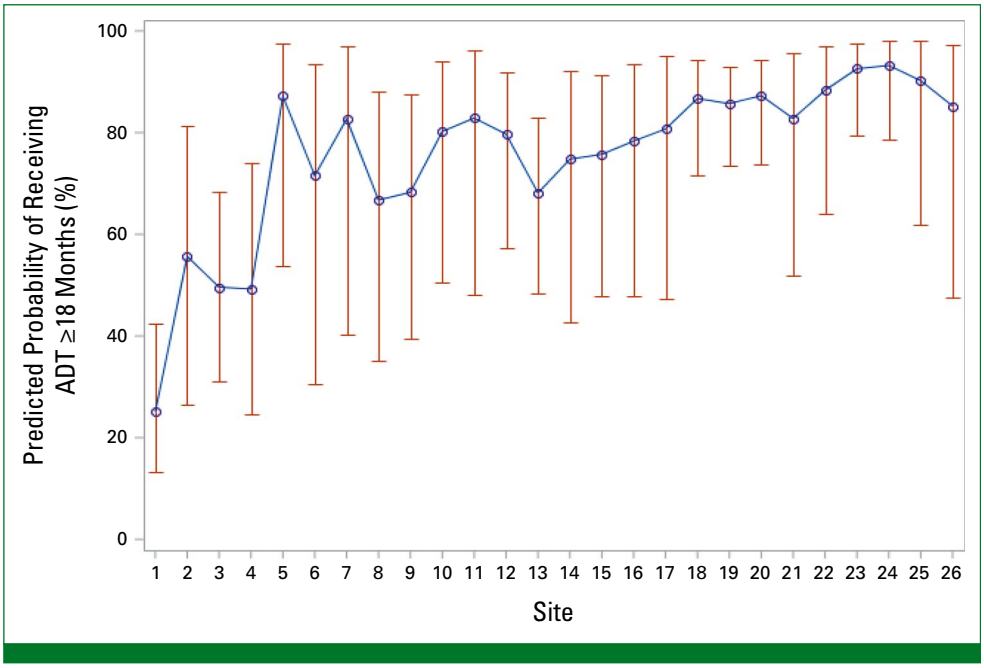

FIG 2. Predicted probability of being recommended guideline-concordant ADT (≥18 months) by site. Using the mixed-effects model (including the estimated site-level random intercept) in Table 2, we calculated site-specific probabilities of guideline-concordant ADT for each patient if treated at each site and then averaged by site. This ensures that the site-level estimates are all based on the same group of patients (the entire cohort). 95% CIs of ADT use by facility by using the distribution of risk factors seen in the MROQC cohort for all sites. Each center is numbered consistently in Figures 1 and 2. ADT, androgen deprivation therapy; MROQC, Michigan Radiation Oncology Quality Consortium.

Treatment intensification remains an area of active interest. Use of ARPIs has risen since the publication of the STAMPEDE M0 trial,[8] but remains overall low, at about 25%. Some providers may be awaiting results from other randomized studies testing the addition of ARPIs to definitive RT and long-term ADT for high-risk prostate cancers, such as DASL-HiCaP (darolutamide *v* placebo), ATLAS (apalutamide *v* placebo), ENZARAD (enzalutamide *v* long-term-ADT alone), and GU-009 PREDICT RT (apalutamide *v* long-term-ADT alone for patients with high genomic risk). Slow uptake may also be due to the increased side effect profile of these medications although over 50% of our cohort had no comorbidities reported. Given randomized evidence suggesting an overall survival benefit with this treatment, additional studies are needed to determine what is limiting ARPI uptake in real-world practice. Recent changes to the 2025 National Comprehensive Cancer Network guidelines,[23] which modify the definition of very high-risk

TABLE 3. Multivariable Analyses of Guideline-Concordant Androgen Deprivation Therapy (≥18 months) Incorporating Patient, Tumor, and Radiation Treatment Variables

	Without the Facility Level				With the Facility Level			
Variable	OR	LCL	UCL	*P*	OR	LCL	UCL	*P*
GG 4 *v* 1/2/3	4.69	2.64	8.56	<.0001	6.23	2.85	13.62	<.0001
GG 5 *v* 1/2/3	7.46	3.89	14.79	<.0001	9.45	4.46	20.06	<.0001
PSA[a] 20-39 *v* ≤19	1.27	0.73	2.27	.41	1.67	0.80	3.49	.17
PSA 40+ *v* ≤19	2.54	1.26	5.43	.012	3.64	1.22	10.87	.021
Node-positive[b] *v* node-negative	3.27	1.78	6.41	.0003	2.94	1.44	5.99	.0031
EBRT[c] + brachy combination *v* EBRT	0.39	0.24	0.64	.0002	1.11	0.67	1.85	.69

Abbreviations: EBRT, external beam radiotherapy; GG, grade group; LCL, lower confidence limit; OR, odds ratio; PSA, prostate-specific antigen; UCL, upper confidence limit.
[a]PSA (ng/mL).
[b]Defined as radiographic lymph node involvement on computed tomography or magnetic resonance imaging.
[c]External beam radiation therapy.

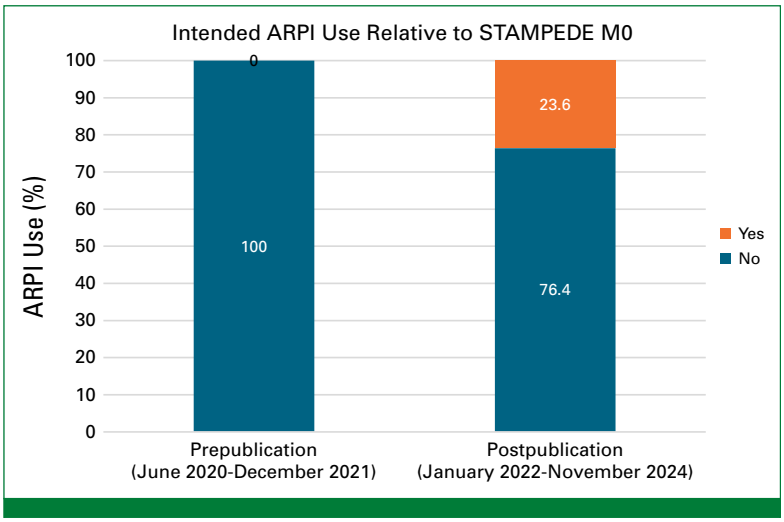

FIG 3. Intended androgen receptor pathway inhibitor use relative to STAMPEDE M0 trial publication. ARPI, androgen receptor pathway inhibitor.

prostate cancer to synchronize with STAMPEDE M0 trial definition (at least two of the following: T3-4, GG 4-5, and PSA >40), may also improve uptake of these treatments in real-world practice through increased provider awareness. Our data suggest that a multifaceted intervention across specialties may be needed as these decisions span medical, radiation, and urologic oncology.

ADT use in combination with EBRT + brachytherapy is an area of controversy. Randomized trials support that high dose rate (HDR) brachytherapy[24,25] and low dose rate (LDR) brachytherapy[26] improve biochemical progression-free survival, but do not affect prostate cancer–specific survival or overall survival. In nonrandomized comparisons, some studies have not shown evidence of a differential benefit from ADT among patients receiving HDR brachytherapy,[27] whereas other studies have shown that less ADT[28] may be appropriate for patients receiving very high-dose RT. Recently, a superiority-designed randomized controlled trial from Japan of patients receiving the combination EBRT + brachytherapy showed no difference in biochemical progression-free survival or overall survival with or without 24 additional months of adjuvant ADT after 6 months of neoadjuvant and concurrent ADT.[29] Another study evaluating practice patterns among the CAPSURE database also found less ADT use among patients with high-risk prostate cancer treated with the combination brachytherapy + EBRT compared with EBRT alone.[16] Our data suggest that centers using brachytherapy recommend shorter-duration ADT than those offering primarily EBRT rather than some providers deciding between RT dose escalation versus extended ADT within a facility.

There are several limitations to our study. Comparisons of ADT utilization across cohorts over time must be interpreted cautiously. The data supporting long-term ADT use have increased over time. Moreover, intended guideline-concordant ADT use is collected prospectively within MROQC, but some patients decline ADT or ARPI or discontinue treatment before reaching the full duration because of patient preference or toxicity, so actual ADT receipt is a subject of future study within MROQC. No meaningful conclusions can be made between intended ADT use and oncologic outcomes because of short follow-up although continuous data collection is ongoing. While intended ADT use by the provider may provide additional insights into practice pattern heterogeneity, patient numbers were too small to permit such an analysis in this study. Finally, participation in MROQC is voluntary, and not all centers in Michigan elect to join the collaborative. Therefore, it is possible that these findings are not generalizable to the entire state of Michigan and beyond.

In conclusion, within a statewide quality consortium, a significant degree of heterogeneity was observed in guideline-concordant intended ADT use for patients with localized, high-risk prostate cancer. These findings highlight the need for personalized ADT approaches and collaborative efforts to standardize high-quality care. Ongoing trials such as NRG GU009 (ClinicalTrials.gov identifier: NCT04513717) will further clarify which patients derive the most benefit from long-term ADT, as will forthcoming data testing the role of ARPI intensification in several ongoing phase III clinical trials.

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AUTHORS' DISCLOSURES OF POTENTIAL CONFLICTS OF INTEREST

Disclosures provided by the authors are available with this article at DOI https://doi.org/10.1200/OP-25-00489.

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AUTHORS' DISCLOSURES OF POTENTIAL CONFLICTS OF INTEREST

Androgen Deprivation Therapy Practice Patterns in High-Risk Prostate Cancer Treated With Definitive Radiotherapy: Prospective Results From a Statewide Quality Consortium

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APPENDIX

TABLE A1. Patient Information for No ADT, Some ADT <18 Months, and Guideline-Concordant ADT

Variable	All	No ADT	ADT 1-17 Months	ADT ≥18 Months
No.	553	50	132	371
Age, years, mean (median)	71.9 (72)	71.2 (71.5)	71.7 (72)	72.1 (72)
Charlson comorbidity index, No. (%)				
0	290 (52.4)	29 (58)	69 (52.3)	192 (51.8)
1	143 (25.9)	12 (24)	37 (28)	94 (25.3)
2+	120 (21.7)	9 (18)	26 (19.7)	85 (22.9)
Cardiovascular disease,[a] No. (%)				
No	443 (80.1)	41 (82)	106 (80.3)	296 (79.8)
Yes	110 (19.9)	9 (18)	26 (19.7)	75 (20.2)
GG, No. (%)				
1/2/3	138 (25.0)	24 (48)	54 (40.9)	60 (16.2)
4	249 (45.0)	22 (44)	53 (40.2)	174 (46.9)
5	166 (30.0)	4 (8)	25 (18.9)	137 (36.9)
Positive cores, %, No. (%)				
<50	213 (38.5)	24 (48)	53 (40.1)	136 (36.7)
≥50	340 (61.5)	26 (52)	79 (59.9)	235 (63.3)
Prostate-specific antigen, No. (%)				
≤19 ng/mL	332 (60.0)	24 (48)	75 (56.8)	233 (62.8)
20-39 ng/mL	147 (26.6)	23 (46)	41 (31.1)	83 (22.4)
40+ ng/mL	74 (13.4)	3 (6)	16 (12.1)	55 (14.8)
T stage, No. (%)				
Missing	11			
T1	345 (63.7)	27 (57.5)	84 (64.1)	234 (64.3)
T2	125 (23.1)	14 (29.8)	29 (22.1)	82 (22.5)
T3/T4	72 (13.3)	6 (12.8)	18 (13.7)	48 (13.2)
Node-positive,[b] No. (%)				
Missing	16			
No	430 (80.1)	42 (91.3)	115 (91.3)	273 (74.8)
Yes	107 (19.9)	4 (8.7)	11 (8.7)	92 (25.2)
STAR-CAP stage, No. (%)				
Missing	40			
IC/IIA/IIB	116 (22.6)	14 (35)	27 (22.5)	75 (21.2)
IIC	162 (31.6)	15 (37.5)	41 (34.2)	106 (30.0)
IIIA/IIIB/IIIC	235 (45.8)	11 (27.5)	52 (43.3)	172 (48.7)

Abbreviations: ADT, androgen deprivation therapy; GG, grade group.
[a]Cerebrovascular disease, congestive heart failure, myocardial infarction, diabetes with organ failure, or peripheral vascular disease.
[b]Defined as radiographic lymph node involvement on computed tomography or magnetic resonance imaging.