

Disparities in Prostate-Specific Membrane Antigen (PSMA)-Targeted Imaging Utilization Among Patients With Advanced Prostate Cancer (PC)

Xiao X. Wei,¹ Oliver Sartor,² Neal D. Shore,³ Elisabeth I. Heath,⁴ Jennifer Nguyen,⁵ Jeetvan Patel,⁵ Barinder Kang,⁵ Mark Fallick,⁵ Clare Byrne,⁶ Kyle Runeckles,⁶ Daniel J. George⁷

¹Department of Medical Oncology, Dana-Farber Cancer Institute, Boston, MA, USA

²Jefferson/LCMC Health, New Orleans, LA, USA

³START Carolinas/Carolina Urologic Research Center, Myrtle Beach, SC, USA

⁴Mayo Clinic, Rochester, MN, USA

⁵Novartis Pharmaceuticals Corporation, East Hanover, NJ, USA

⁶Asclepius Analytics, New York, NY, USA

⁷Department of Medicine, Duke Cancer Institute, Duke University School of Medicine, Durham, NC, USA

Background

PSMA scans are used to stage PC and guide treatment selection, particularly for ¹⁷⁷Lu-PSMA-617. Disparities in care have previously been identified among patients with PC. The aim of this study was to examine trends in PSMA scan utilization, as well as associations between PSMA scan utilization and post-imaging disease assessment and treatment changes among subgroups of patients defined by race, insurance status, and treating physician specialty.

Methods

This was a retrospective cohort study using data from PRECISION, an integrated real-world data platform of patients with metastatic PC (mPC) from multidisciplinary practices. Adult men diagnosed with mPC (index period) between January 1, 2020, and September 30, 2024, were included. Patient characteristics were evaluated at index. PSMA scan utilization was examined in the 1–5 years pre- and post-index; clinical documentation of disease progression and new treatment initiation were assessed within 90 days from each scan. All analyses were descriptive.

Results

A total of 33,255 patients with mPC were included (median age 74 years). At index, 82% were seen by urologists, 96% were treated at community practices, and 69% had a Gleason score of ≥ 7 . Overall, 57% of patients were white, 13% Black, 1% Asian, and 29% other/unknown race; 55% of patients had Medicare, 28% commercial insurance, 1% Medicaid, and 16% other/unknown insurance.

During the study, 29% of patients had ≥ 1 PSMA scan; of those, 80% had only 1. PSMA scan utilization was numerically lowest among Black patients (25%), followed by white (28%) and Asian patients (34%) (**Figure**). Fewer patients with Medicaid coverage had PSMA scans (23%) than those with Medicare (29%) or commercial coverage (30%). Additionally, PSMA scan use was lower in patients treated by oncologists (23%) than urologists (31%).

PSMA scan utilization increased over time, with 12% of patients diagnosed in 2020 and 40% in 2023 having ≥ 1 scan. PSMA scans were most common in Year 1 post-index, with 24% of patients having ≥ 1

scan during that time. The proportion of patients receiving scans declined over the 5 years post-index, a finding consistent across subgroups.

Overall, 74% and 40% of patients had a new documented progression or new treatment initiation, respectively, within 90 days post-scan. The rate of new documented progression post-PSMA scan was similar across subgroups ($\geq 70\%$). New treatment initiation rates post-scan were highest in Black (48%) and Asian (49%) patients, and lowest in patients with Medicaid (34%).

Conclusions

These results indicate that although PSMA imaging for mPC has increased over time it remains underutilized, particularly in vulnerable groups. More data are needed to understand the impact of PSMA imaging in terms of treatment choice and treatment assessment.

Source of funding

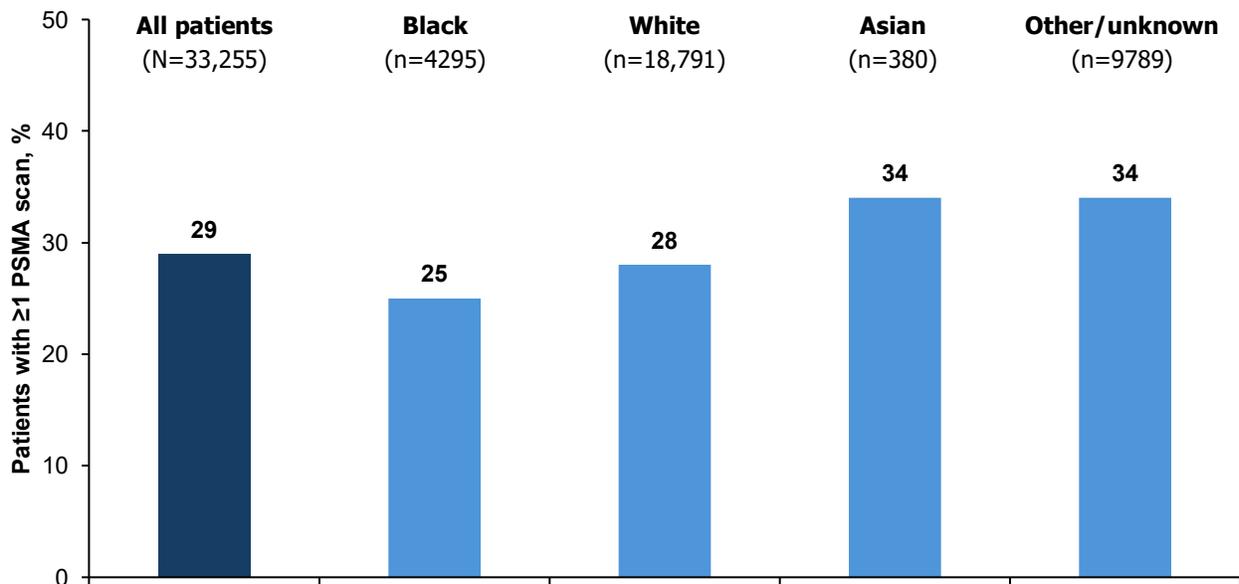
Novartis Pharmaceuticals Corporation.

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Koocheckpour, Sartor AO, inventors. Saposin C and receptors as targets for treatment of benign and malignant disorders. US patent awarded January 23, 2007 (patent no. 7,166,691); Expert Testimony: Sanofi; Travel, Accommodations, Expenses: Bayer, Johnson & Johnson, Sanofi, AstraZeneca, Progenics, Lantheus Medical Imaging. **JN, JP, BK, and MF** are employees of Novartis. **CB**: Consulting/Advisory role: Novartis; Research Funding: Novartis. **KR**: Consulting/Advisory role: Novartis; Research Funding: Novartis. **DJG**: Leadership: Capiro Biosciences; Honoraria: Sanofi, Bayer, Exelixis, EMD Serono, OncLive, Pfizer, UroToday, American Association for Cancer Research, Axess Oncology, Janssen Oncology, Millenium Medical Publishing, Novartis, AstraZeneca, Aveo, Eisai, IDEOlogy Health, Myovant Sciences, Medscape, Merck, Nektar, Propella Therapeutics, Seagen; Consultancy: Bayer, Exelixis, Pfizer, Sanofi, Astellas Pharma, Bristol Myers Squibb, Janssen, Merck Sharp & Dohme, Myovant Sciences, AstraZeneca, Michael J. Hennessy Associates, Constellation Pharmaceuticals, Physicians' Education Resource, Propella Therapeutics, RevHealth, Xcures, Novartis; Speakers' Bureau: Sanofi, Bayer, Exelixis; Research Funding: Exelixis, Janssen Oncology, Novartis, Pfizer, Astellas Pharma, Bristol Myers Squibb, Bayer, Dendreon, Calithera Biosciences, Sanofi/Aventis, Merck, Corvus Pharmaceuticals; Expert Testimony: Exelixis; Travel, Accommodations, Expenses: Exelixis, Pfizer, Novartis, Bayer.

Figure. Rate of PSMA scans by self-identified racial group.



PSMA, prostate-specific membrane antigen.