

# Practice-Changing Advances in Hormone-Sensitive Prostate Cancer

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Treatment Intensification and Biomarker-Directed Therapy — September 16, 2026

Rana R. McKay, MD, FASCO

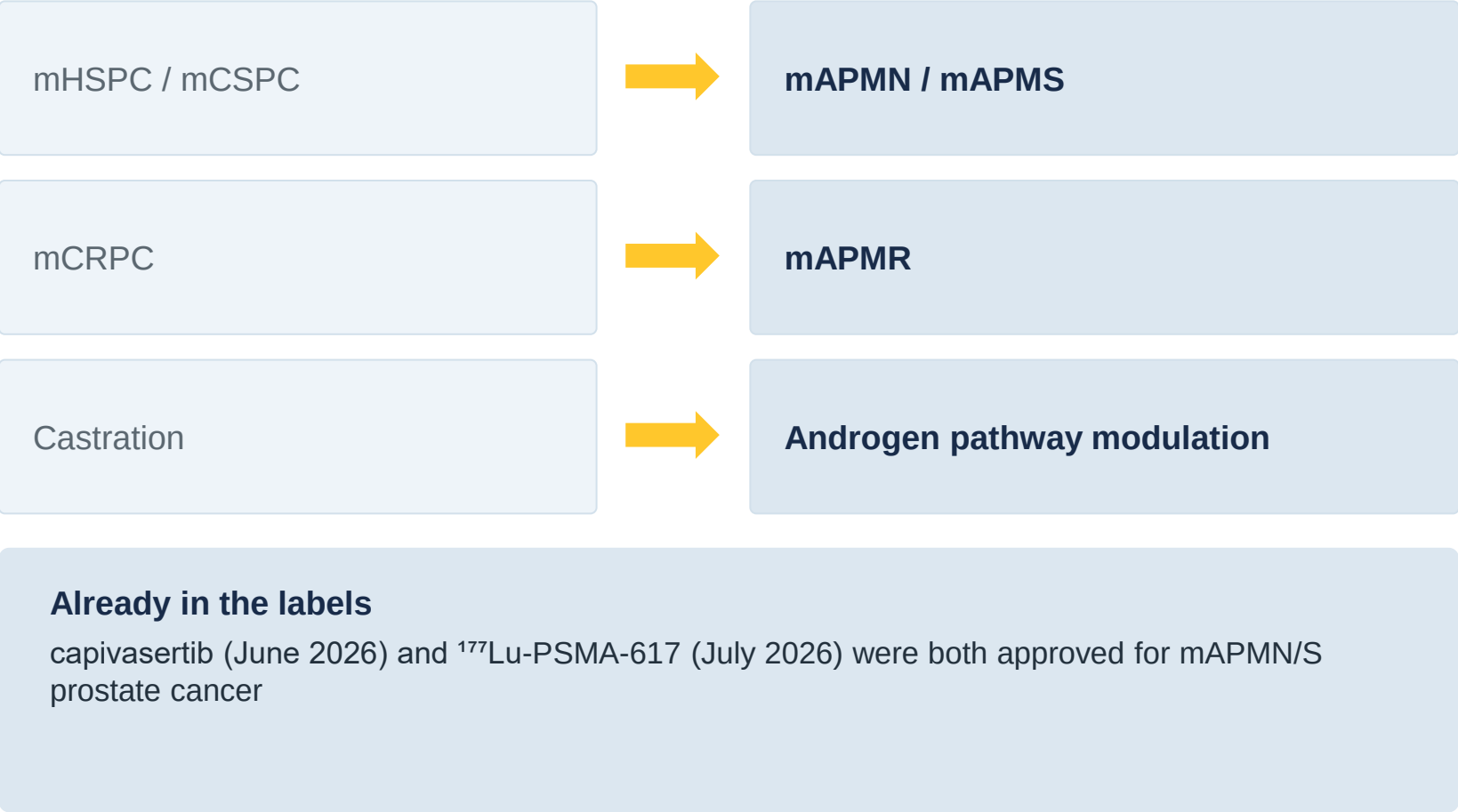
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# Disclosures

- Consultant/advisor with Ambrx, Arcus, Artera, AstraZeneca, Aveo, Bayer, Blue Earth Diagnostics, Bristol-Myers Squibb, Calithera, Caris, Dendreon, Exelixis, GSK, Johnson & Johnson, Lilly, Merck, Myovant, Neomorph, Novartis, Pfizer, Sanofi, SeaGen, Sorrento Therapeutics, Telix, Tempus.
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# Level Setting: New Disease-State Terminology



Special Articles

### Trial Design and Objectives for Patients With Prostate Cancer: Recommendations From the Prostate Cancer Working Group 4

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**ABSTRACT**

**PURPOSE** The continuous development of new imaging approaches, molecular phenotyping, genetic subtypes, prognosis assessments, and effective therapies across a range of disease states has created a need to redefine terminology and best practices for clinical trial conduct in patients with advanced prostate cancer.

**METHODS** We convened an international expert committee of diverse working groups, the Prostate Cancer Working Group 4 (PCWG4), between 2016 and 2025. Our objective was to formulate updated criteria based on emerging evidence and clinical trial data in a biomarker context to provide guidance for clinical trial design, eligibility, and end point assessments for patients with advanced prostate cancer.

**RESULTS** PCWG4 redefines terminology around the disease state and previous therapies in a patient-centric context and terminology focused on androgen pathway modulation. We consider imaging, with a particular focus on positron emission tomography (PET)-defined disease. New recommendations are provided for disease state terminology, defining eligibility criteria, response and delay/prevent end points, intervals for reassessments including imaging, and patient-reported outcome determination. We provide recommendations in a biomarker-based context of use for the intended indication, reflective of patient benefit for specific interventions. We emphasize the need for development of validated PET imaging and molecular and phenotypic criteria as well as trial designs to appropriately risk stratify patients, predict and assess benefit, and measure post-treatment outcomes reliably in a trial framework.

**CONCLUSION** PCWG4 updates recommendations on patient and tumor characterization, therapy development, and imaging criteria and extends guidance into earlier androgen pathway modulator-naïve/sensitive disease states to reflect an evolving, heterogeneous, and diverse patient population to optimize treatment benefits for all patients.

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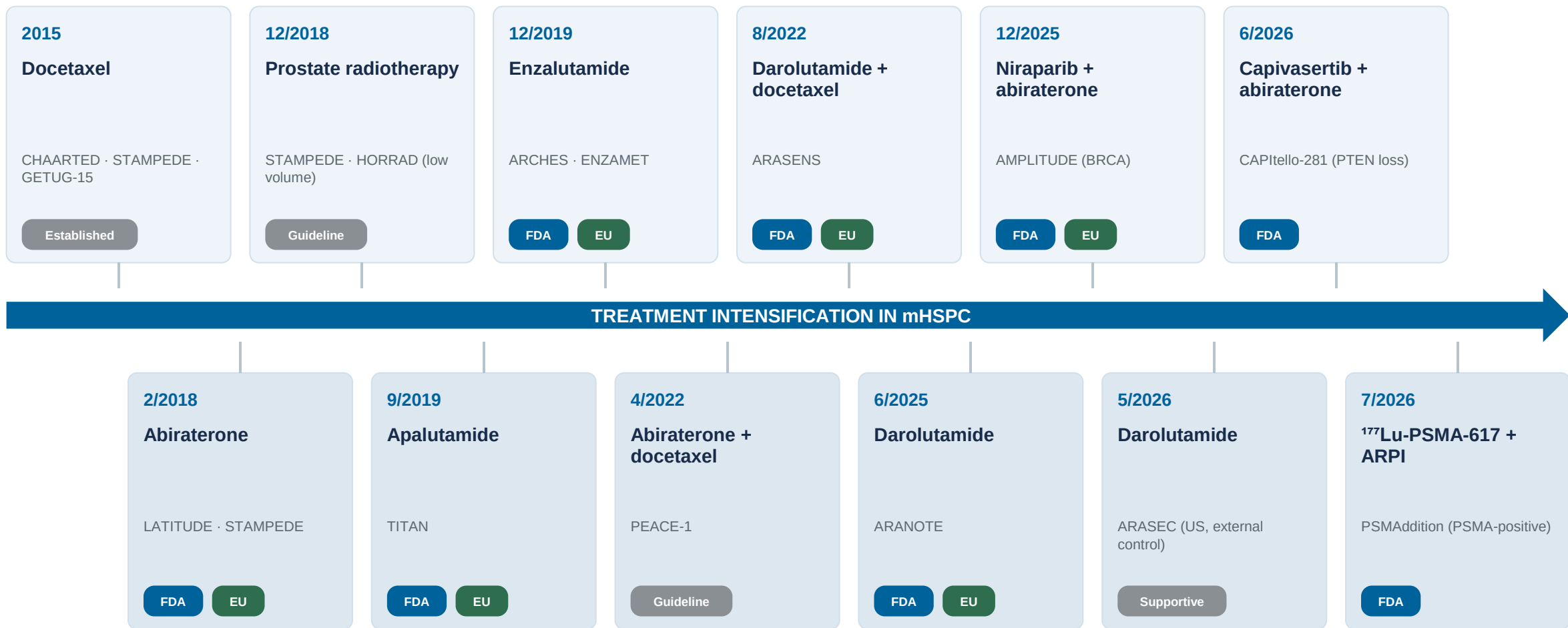
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Armstrong AJ, et al. J Clin Oncol. 2026;44:1249-1265

Abbreviations: ADT, androgen deprivation therapy; APM, androgen pathway modulation; ARPI, androgen receptor pathway inhibitor; mAPMN/S, metastatic APM-naïve or APM-sensitive; mAPMR, metastatic APM-resistant; mCRPC, metastatic castration-resistant prostate cancer; mCSPC, metastatic castration-sensitive prostate cancer; mHSPC, metastatic hormone-sensitive prostate cancer; PCWG4, Prostate Cancer Working Group 4; PSMA, prostate-specific membrane antigen.

Armstrong AJ, Morris MJ, Abida W, et al. Trial Design and Objectives for Patients With Prostate Cancer: Recommendations From the Prostate Cancer Working Group 4. J Clin Oncol. 2026;44:1249-1265. Licensed under CC BY 4.0.

# Treatment Landscape for mHSPC

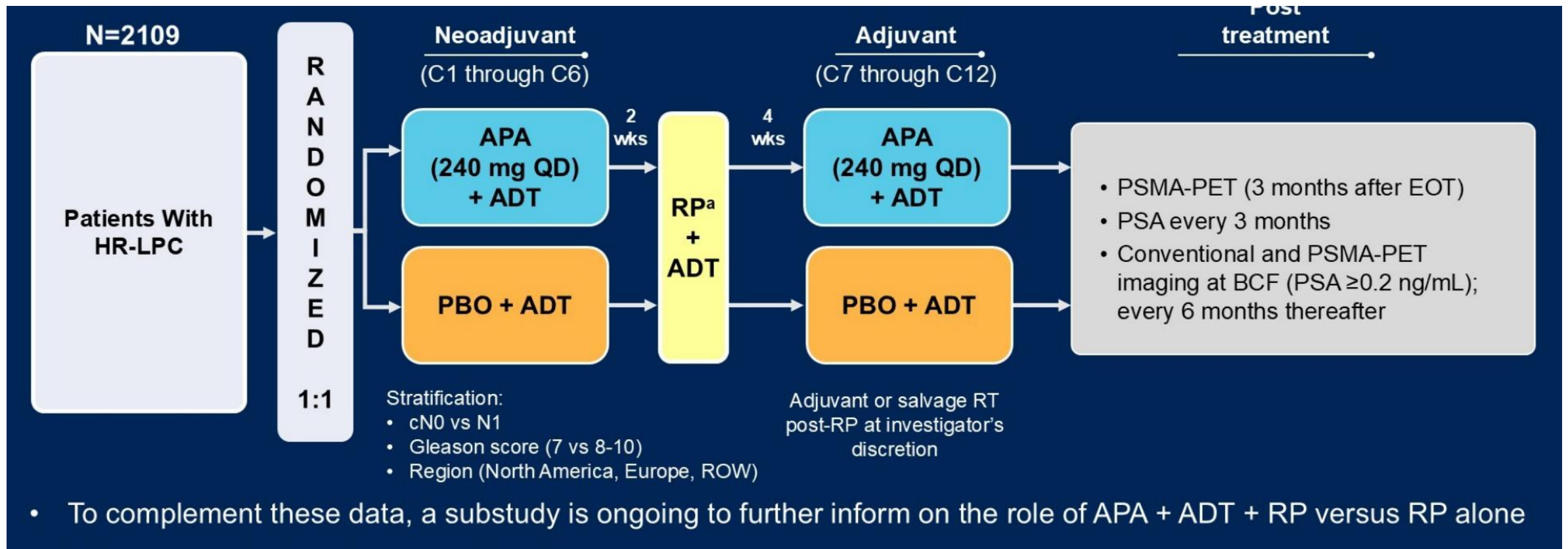


Abbreviations: ADT, androgen deprivation therapy; ARPI, androgen receptor pathway inhibitor; BRCA, breast cancer susceptibility gene; EBRT, external beam radiotherapy; EU, European Union; FDA, US Food and Drug Administration; mHSPC, metastatic hormone-sensitive prostate cancer; PSMA, prostate-specific membrane antigen; PTEN, phosphatase and tensin homolog.

Approval status as of August 2026. Guideline = supported by guidelines without a specific regulatory label. EU pending = under review or not yet submitted.

# PROTEUS: Perioperative Apalutamide in High-Risk Localized Disease

Randomized, double-blind, placebo-controlled phase 3 — N=2109 — dual primary endpoints of pCR/MRD and MFS

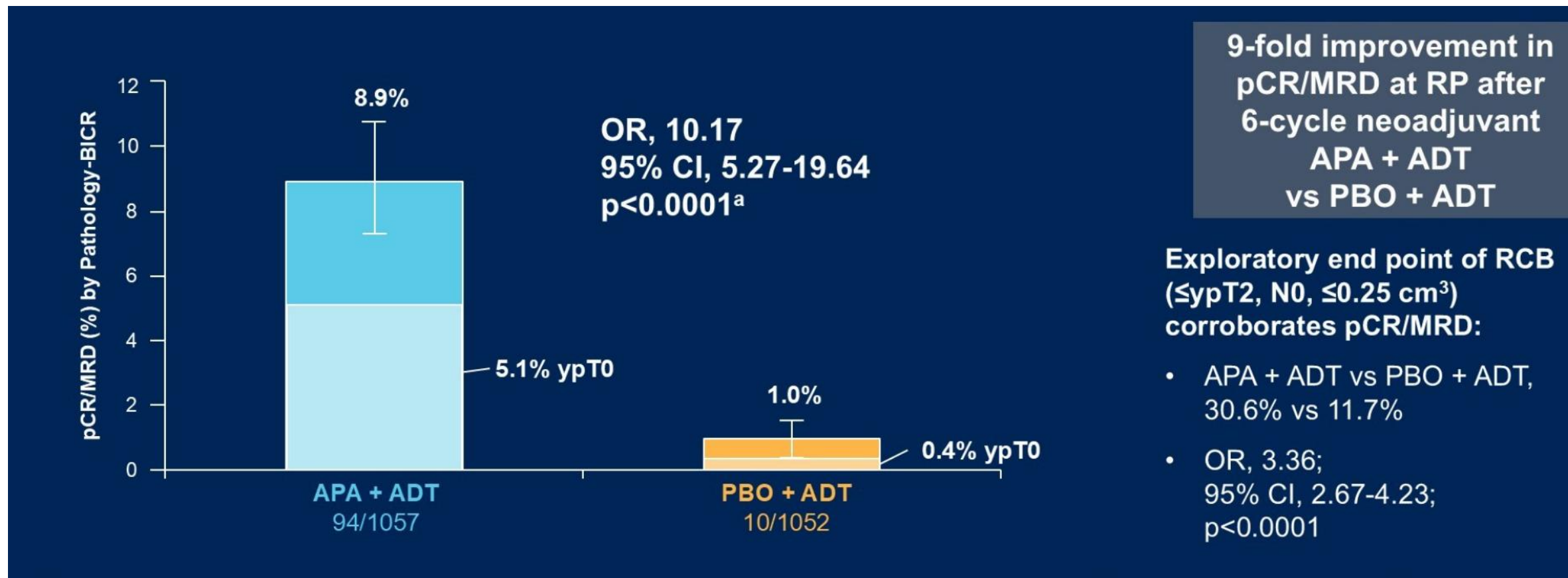


ADT=androgen deprivation therapy; APA=apalutamide; BCF=biochemical failure; MFS=metastasis-free survival; MRD=minimal residual disease; pCR=pathologic complete response; PBO=placebo; PSMA-PET=prostate-specific membrane antigen positron emission tomography; RP=radical prostatectomy.

Taplin et al, NEJM, 2026; Taplin et al, ASCO 2026

# PROTEUS: Dual Primary Endpoint Met — pCR/MRD

*Nine-fold improvement in pathologic response — but 91% of patients still had residual disease at prostatectomy*

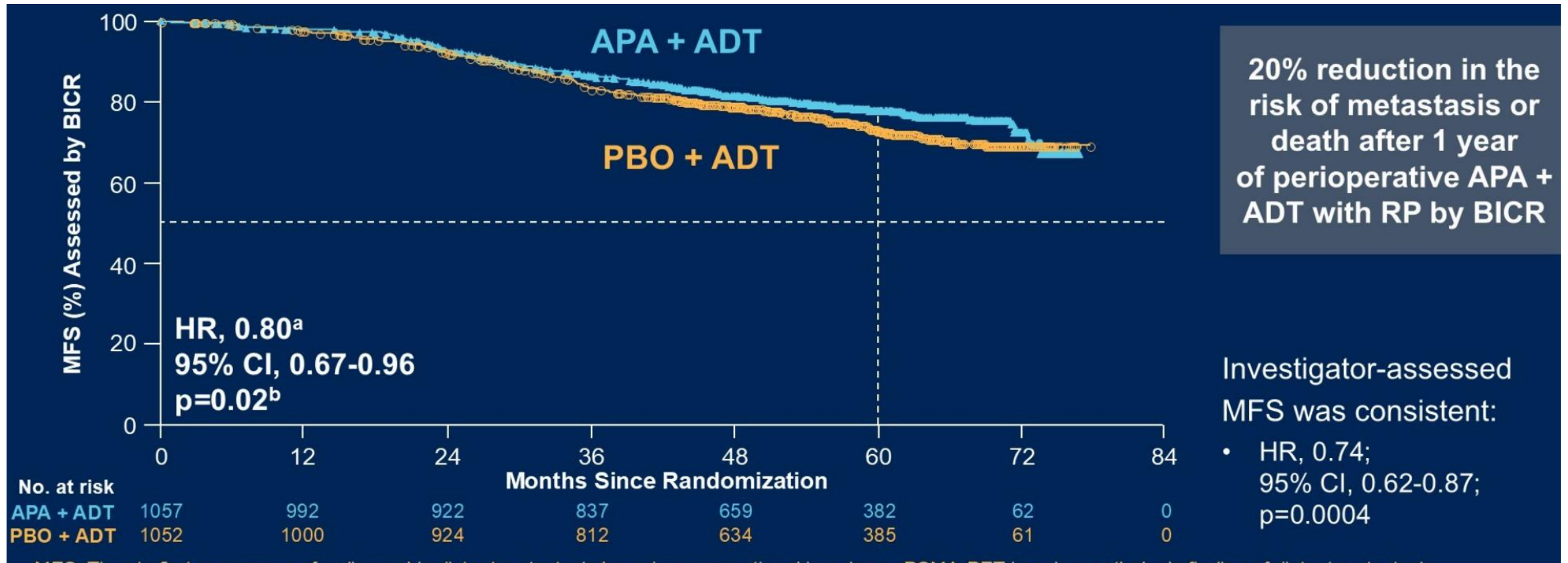


ADT=androgen deprivation therapy; APA=apalutamide; MRD=minimal residual disease; OR=odds ratio; pCR=pathologic complete response; PBO=placebo; RCB=residual cancer burden; RP=radical prostatectomy.

Taplin et al, NEJM, 2026

# PROTEUS: Dual Primary Endpoint Met — Metastasis-Free Survival

HR 0.80 (95% CI 0.67–0.96),  $p=0.02$  — perioperative intensification changes the natural history



# Treatment Intensification — High Volume / High Risk

Overall survival hazard ratios in the high-volume or high-risk subgroup of each trial

| TRIAL                   | TREATMENT ARM                  | CONTROL ARM            | N    | MEDIAN FU | OS | HR (95% CI)             |
|-------------------------|--------------------------------|------------------------|------|-----------|----|-------------------------|
| <b>ARPI</b>             |                                |                        |      |           |    |                         |
| <b>LATITUDE</b>         | Abiraterone + ADT              | ADT                    | 955  | 52        | 50 | <b>0.62</b> (0.52–0.74) |
| <b>STAMPEDE-G</b>       | Abiraterone + ADT              | ADT                    | 473  | 42        | —  | <b>0.54</b> (0.41–0.70) |
| <b>ARCHES</b>           | Enzalutamide + ADT*            | ADT*                   | 727  | 45        | —  | <b>0.66</b> (0.52–0.83) |
| <b>ENZAMET</b>          | Enzalutamide + ADT ± docetaxel | ADT + NSAA ± docetaxel | 588  | 34        | —  | <b>0.79</b> (0.63–0.98) |
| <b>TITAN</b>            | Apalutamide + ADT*             | ADT*                   | 660  | 44        | —  | <b>0.70</b> (0.56–0.88) |
| <b>ARPI + DOCETAXEL</b> |                                |                        |      |           |    |                         |
| <b>PEACE-1</b>          | Abiraterone + SOC ± docetaxel  | SOC ± docetaxel        | 456  | 42        | 61 | <b>0.72</b> (0.55–0.95) |
| <b>ARASENS</b>          | Darolutamide + docetaxel + ADT | Docetaxel + ADT        | 1005 | 44        | NR | <b>0.69</b> (0.57–0.82) |
| <b>RADIOTHERAPY</b>     |                                |                        |      |           |    |                         |
| <b>STAMPEDE-H</b>       | Prostate radiotherapy + ADT    | ADT ± docetaxel        | 1120 | 37        | —  | <b>1.07</b> (0.90–1.28) |
| <b>HORRAD</b>           | Prostate radiotherapy + ADT    | ADT                    | 272  | 47        | —  | <b>1.06</b> (0.80–1.39) |

\*Prior docetaxel allowed. Median follow-up in months; overall survival in months where reported. Navy hazard ratios have confidence intervals excluding 1.

**Every systemic intensification helps in high volume — prostate radiotherapy does not.**

Abbreviations: ADT, androgen deprivation therapy; ARPI, androgen receptor pathway inhibitor; CI, confidence interval; FU, follow-up; HR, hazard ratio; NR, not reached; NSAA, nonsteroidal antiandrogen; OS, overall survival; RT, radiotherapy; SOC, standard of care. LATITUDE: Fizazi, NEJM 2017. STAMPEDE-G: Hoyle, Eur Urol 2019. ARCHES: Armstrong, JCO 2022. ENZAMET: Davis, NEJM 2019. TITAN: Chi, JCO 2021. PEACE-1: Fizazi, Lancet 2022. ARASENS: Smith, NEJM 2022. STAMPEDE-H: Parker, Lancet 2018. HORRAD: Boeve, Eur Urol 2019.

# Doublet Therapy — Low Volume / Low Risk

Overall survival hazard ratios in the low-volume or low-risk subgroup of each trial

| TRIAL                   | TREATMENT ARM                  | CONTROL ARM            | N   | MEDIAN FU | OS | HR (95% CI)             |
|-------------------------|--------------------------------|------------------------|-----|-----------|----|-------------------------|
| <b>ARPI</b>             |                                |                        |     |           |    |                         |
| <b>LATITUDE</b>         | Abiraterone + ADT              | ADT                    | 243 | 52        | NR | <b>0.72</b> (0.47–1.10) |
| <b>STAMPEDE-G</b>       | Abiraterone + ADT              | ADT                    | 428 | 42        | —  | <b>0.66</b> (0.44–0.98) |
| <b>ARCHES</b>           | Enzalutamide + ADT*            | ADT*                   | 423 | 45        | —  | <b>0.66</b> (0.43–1.03) |
| <b>ENZAMET</b>          | Enzalutamide + ADT ± docetaxel | ADT + NSAA ± docetaxel | 537 | 34        | —  | <b>0.54</b> (0.39–0.74) |
| <b>TITAN</b>            | Apalutamide + ADT*             | ADT*                   | 390 | 44        | —  | <b>0.52</b> (0.35–0.79) |
| <b>ARPI + DOCETAXEL</b> |                                |                        |     |           |    |                         |
| <b>PEACE-1</b>          | Abiraterone + SOC ± docetaxel  | SOC ± docetaxel        | 254 | 42        | NR | <b>0.83</b> (0.50–1.39) |
| <b>ARASENS</b>          | Darolutamide + docetaxel + ADT | Docetaxel + ADT        | 300 | 44        | NR | <b>0.68</b> (0.41–1.13) |
| <b>RADIODTHERAPY</b>    |                                |                        |     |           |    |                         |
| <b>STAMPEDE-H</b>       | Prostate radiotherapy + ADT    | ADT ± docetaxel        | 819 | 37        | —  | <b>0.68</b> (0.52–0.90) |
| <b>HORRAD</b>           | Prostate radiotherapy + ADT    | ADT                    | 160 | 47        | —  | <b>0.68</b> (0.42–1.10) |

\*Prior docetaxel allowed. Median follow-up in months. Navy hazard ratios have confidence intervals excluding 1.

**The mirror image: ARPI doublets and prostate radiotherapy both help; adding docetaxel has more limited benefit.**

Abbreviations: ADT, androgen deprivation therapy; ARPI, androgen receptor pathway inhibitor; CI, confidence interval; FU, follow-up; HR, hazard ratio; NR, not reached; NSAA, nonsteroidal antiandrogen; OS, overall survival; RT, radiotherapy; SOC, standard of care.

LATITUDE: Fizazi, NEJM 2017. STAMPEDE-G: Hoyle, Eur Urol 2019. ARCHES: Armstrong, JCO 2022. ENZAMET: Davis, NEJM 2019. TITAN: Chi, JCO 2021. PEACE-1: Fizazi, Lancet 2022. ARASENS: Smith, NEJM 2022. STAMPEDE-H: Parker, Lancet 2018. HORRAD: Boeve, Eur Urol 2019.

# No Trial Has Randomized Triplet vs ARPI Doublet

## ARPI DOUBLET TRIALS

## CONTROL ARM

**ARPI + ADT**

vs

**ADT ± NSAA**

LATITUDE · STAMPEDE-G · ARCHES · ENZAMET · TITAN · ARANOTE

## TRIplet TRIALS

## CONTROL ARM

**ARPI + Docetaxel + ADT**

vs

**Docetaxel + ADT**

PEACE-1 · ARASENS



**The two treatment arms have never been compared with each other.**  
Every triplet-versus-doublet estimate comes from indirect comparison.

*Abbreviations: ADT, androgen deprivation therapy; ARPI, androgen receptor pathway inhibitor; D, docetaxel; NMA, network meta-analysis; NSAA, nonsteroidal antiandrogen.*

Fizazi K, et al. Lancet. 2022;399:1695. Smith MR, et al. N Engl J Med. 2022;386:1132. Docetaxel was permitted but not randomized in ARCHES, TITAN, and ENZAMET.

# Genomic Factors: What to Test and What It Changes

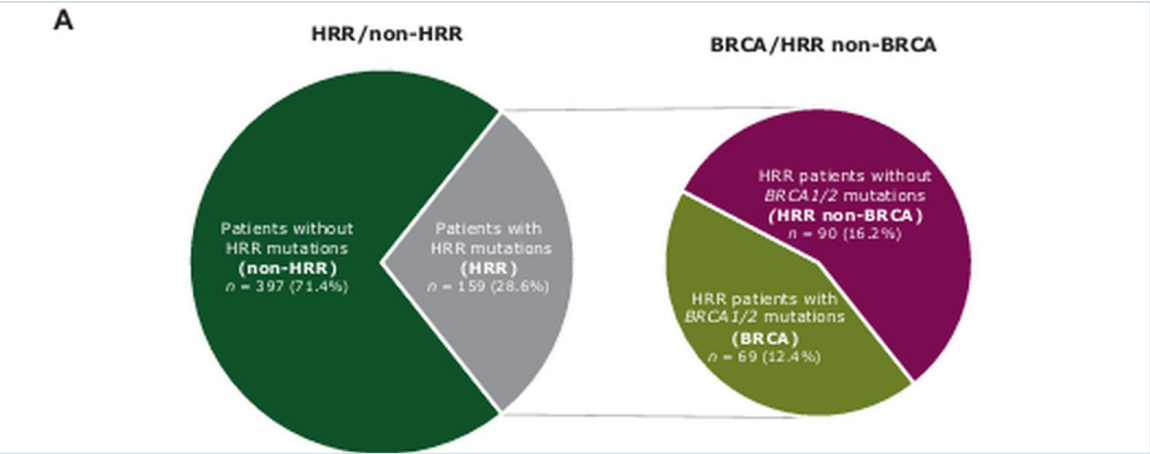
| BIOMARKER                                                                              | PREVALENCE              | HOW IT IS FOUND            | WHAT IT UNLOCKS                                               |
|----------------------------------------------------------------------------------------|-------------------------|----------------------------|---------------------------------------------------------------|
| ● <b>BRCA1 / BRCA2</b>                                                                 | 12.4% of mAPMS          | Germline and somatic panel | <b>Niraparib + abiraterone (BRCA2, FDA)</b>                   |
| ● <b>Other HRR genes</b>                                                               | 16.2% additional        | Somatic panel or ctDNA     | <b>PARP inhibitor combinations; benefit is gene-dependent</b> |
| ● <b>PTEN deficiency</b>                                                               | ~25% of de novo disease | IHC on diagnostic tissue   | <b>Capivasertib + abiraterone</b>                             |
| ● <b>SPOP</b>                                                                          | 10%                     | Somatic panel or ctDNA     | <b>Sensitivity to hormone therapy</b>                         |
| ● <b>MSI-H / dMMR</b>                                                                  | ~3%                     | Panel or IHC               | <b>Pembrolizumab at castration resistance</b>                 |
| <b>Germline and somatic testing belong at diagnosis, not at castration resistance.</b> |                         |                            |                                                               |

Abbreviations: ARPI, androgen receptor pathway inhibitor; BRCA, breast cancer susceptibility gene; ctDNA, circulating tumor DNA; dMMR, mismatch repair deficient; HRR, homologous recombination repair; IHC, immunohistochemistry; MSI-H, microsatellite instability-high; PARP, poly(ADP-ribose) polymerase; PTEN, phosphatase and tensin homolog; mAPMS, metastatic androgen pathway modulation sensitive; FDA, Food and Drug Administration.

Olmos D, et al. Ann Oncol. 2025;36:1190 (HRR prevalence, n = 556). Pritchard CC, et al. N Engl J Med. 2016 (germline). Abida W, et al. PNAS. 2019 (somatic). Prevalence varies by cohort and assay.

# BRCA and HRR Alterations in mAPMS PC: Prevalence and Prognosis

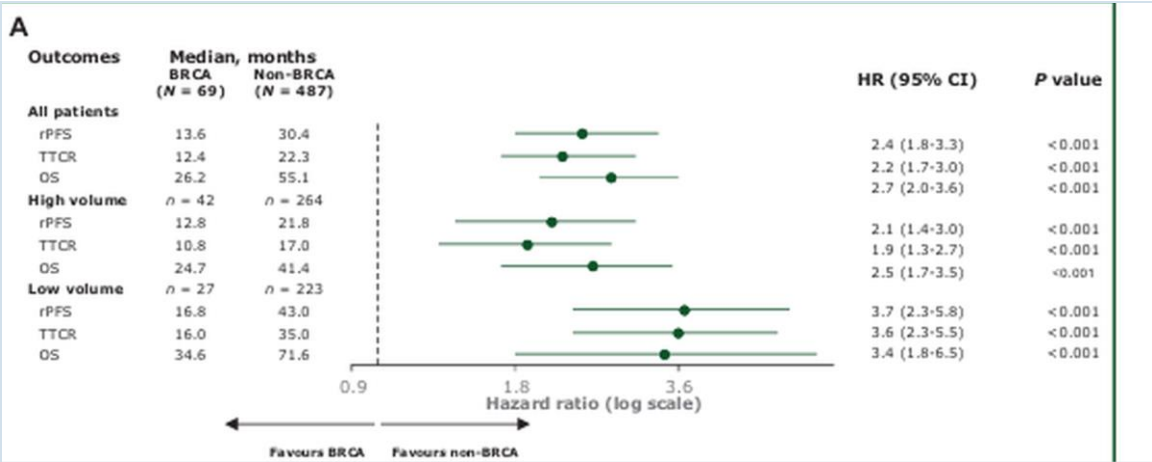
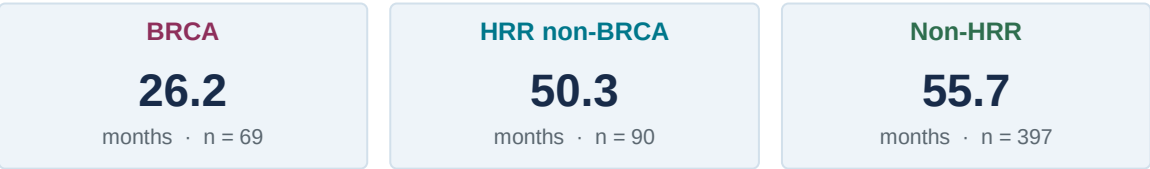
CAPTURE / ACHILLES · 556 patients with paired somatic and germline sequencing · median follow-up 52 months



## PREVALENCE



## MEDIAN OVERALL SURVIVAL BY MOLECULAR GROUP



## MEDIAN OVERALL SURVIVAL: BRCA-ALTERED vs NON-BRCA

|              | BRCA    | NON-BRCA |        |
|--------------|---------|----------|--------|
| All patients | 26.2 mo | 55.1 mo  | HR 2.7 |
| High volume  | 24.7 mo | 41.4 mo  | HR 2.5 |
| Low volume   | 34.6 mo | 71.6 mo  | HR 3.4 |

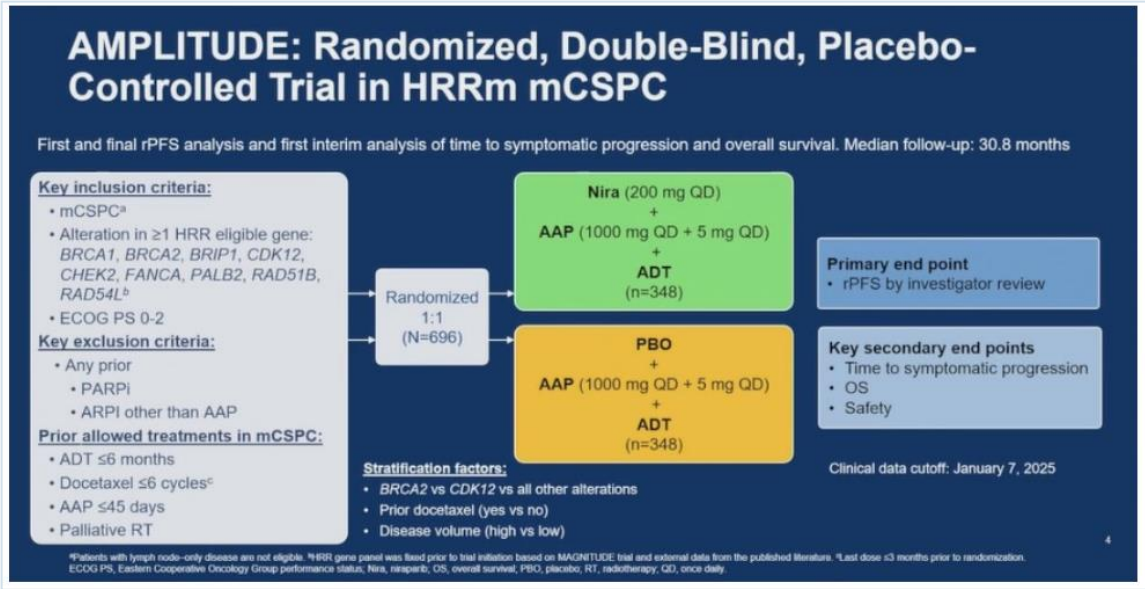
The poor prognosis is driven by BRCA: 25.0 vs 50.3 months versus HRR non-BRCA (HR 2.7, 1.8–4.1). Non-BRCA HRR tracks close to non-HRR.

Abbreviations: ARPI, androgen receptor pathway inhibitor; BRCA, breast cancer susceptibility gene; HR, hazard ratio; HRR, homologous recombination repair; mAPMS PC, metastatic androgen pathway modulation sensitive prostate cancer; OS, overall survival; rPFS, radiographic progression-free survival; TTCR, time to castration resistance.  
Olmos D, Lorente D, Jambrija A, et al. Ann Oncol. 2025;36(10):1190-1202. Figures 1A and 4A reproduced under CC BY (open access). Inverse probability of treatment weighting analysis.

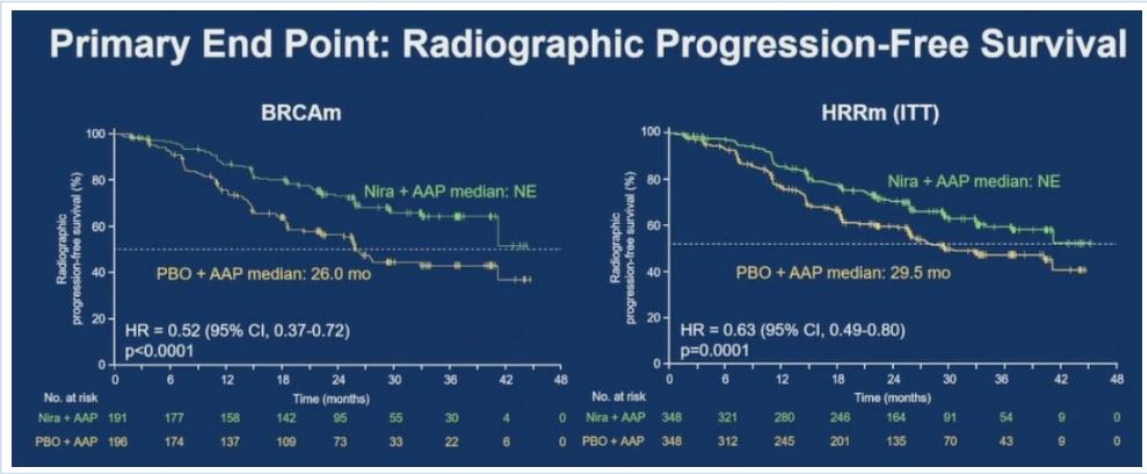
# AMPLITUDE — Niraparib + Abiraterone

HRR-altered mHSPC · N = 696 · rPFS 0.52 in BRCA, 0.63 in all HRR · FDA approved for BRCA2 (Dec 2025)

## STUDY DESIGN



## PRIMARY ENDPOINT



Intensify up front in BRCA-altered disease rather than waiting for castration resistance

Non-BRCA HRR: equipoise remains — the US label is BRCA2 only

Grade 3–4 anemia 30%; 25% required transfusion

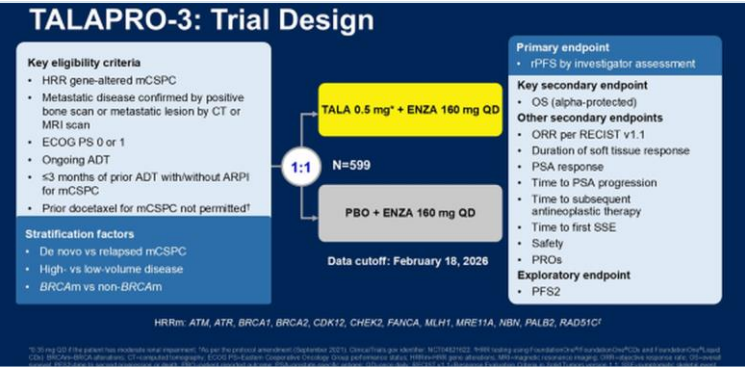
Abbreviations: AAP, abiraterone acetate plus prednisone; BRCA, breast cancer susceptibility gene; CI, confidence interval; FDA, US Food and Drug Administration; HR, hazard ratio; HRR, homologous recombination repair; mHSPC, metastatic hormone-sensitive prostate cancer; OS, overall survival; rPFS, radiographic progression-free survival.

Attard G, et al. Presented at ASCO 2025, LBA5006; published in Nat Med. 2025. Figures from the presented slides.

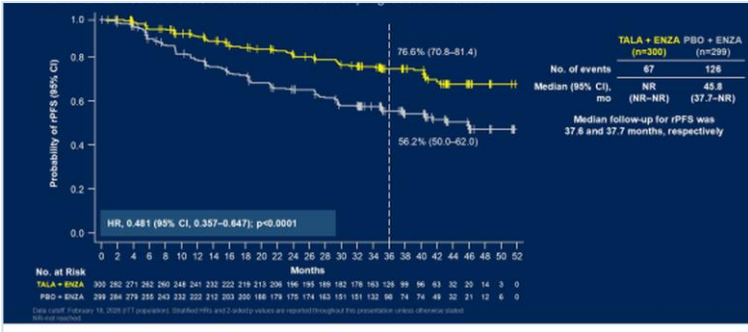
# TALAPRO-3 — Talazoparib + Enzalutamide

HRR-altered mCSPC · N = 599 · rPFS 0.48 (52% risk reduction) · ASCO 2026 and NEJM

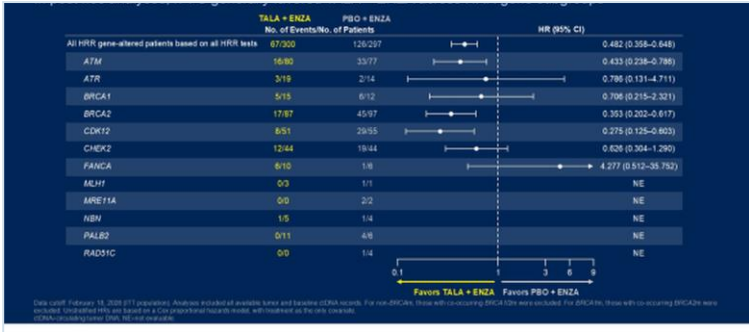
## STUDY DESIGN



## PRIMARY ENDPOINT



## BY GENE



Largest effect size reported in this setting, on top of an already-active enzalutamide control (median 45.8 months)

Post hoc by-gene analysis favors the combination across HRR genes; BRCA2 0.35, ATM 0.43, CDK12 0.28

Grade 3–4 anemia 51%; protocol dose reduction kept 95% of patients on talazoparib

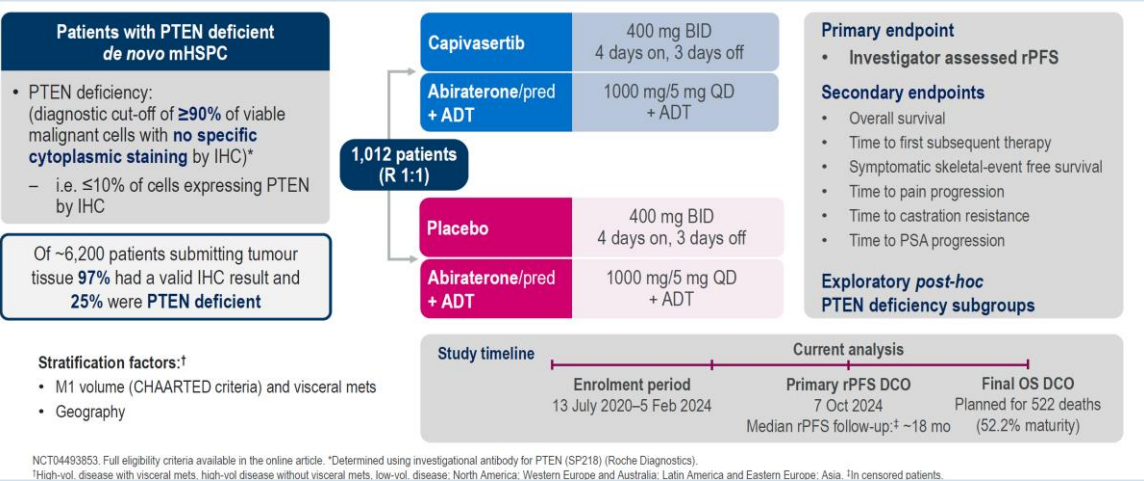
Abbreviations: BRCA, breast cancer susceptibility gene; CI, confidence interval; HR, hazard ratio; HRR, homologous recombination repair; mHSPC, metastatic hormone-sensitive prostate cancer; NR, not reached; OS, overall survival; rPFS, radiographic progression-free survival.

Agarwal N, Matsubara A, Azad A, et al. N Engl J Med. 2026; presented at ASCO 2026, LBA5007. Figures from the presented slides.

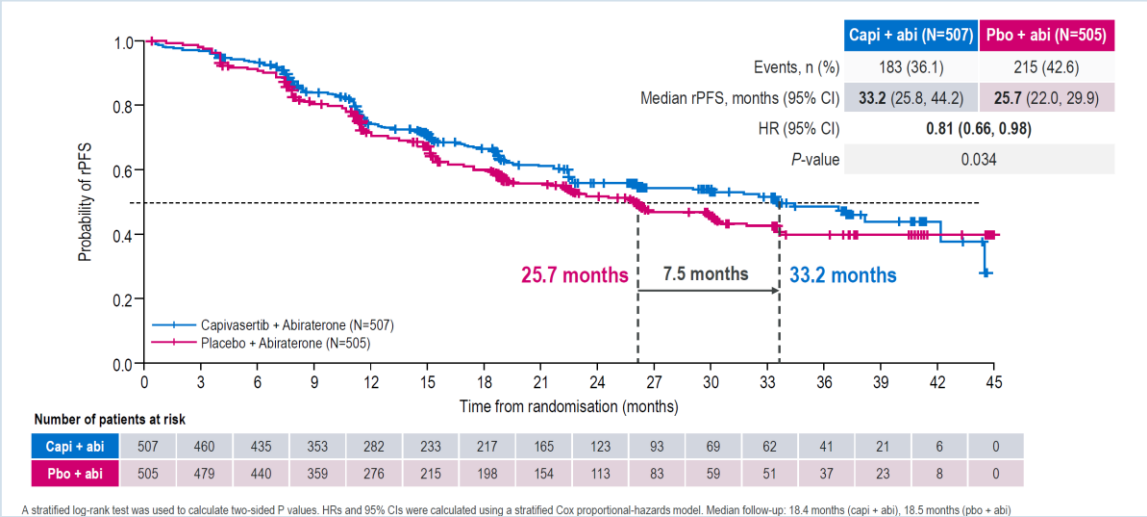
# CAPItello-281 — Capivasertib + Abiraterone

PTEN-deficient de novo mHSPC · N = 1012 · rPFS 0.81 (33.2 vs 25.7 months) · FDA approved Jun 2026

## STUDY DESIGN



## PRIMARY ENDPOINT



Adds PTEN immunohistochemistry to the tests that must be sent at diagnosis

Modest absolute gain and no overall survival signal yet (HR 0.90 at 26% maturity)

Diarrhea 52%, hyperglycemia 38%, rash 35%; intermittent dosing needs written instructions

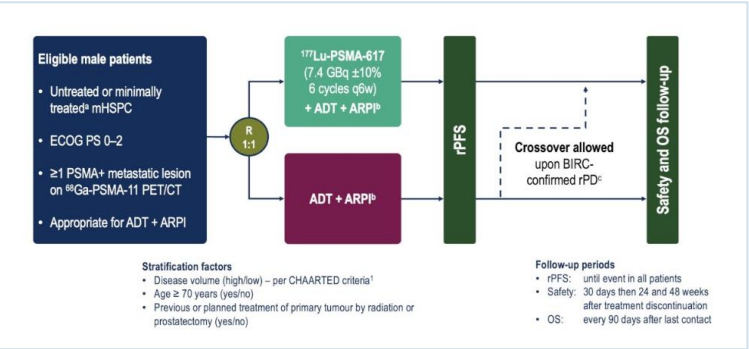
Abbreviations: CI, confidence interval; FDA, US Food and Drug Administration; HR, hazard ratio; IHC, immunohistochemistry; mHSPC, metastatic hormone-sensitive prostate cancer; OS, overall survival; PTEN, phosphatase and tensin homolog; rPFS, radiographic progression-free survival.

Fizazi K, Clarke NW, De Santis M, et al. Ann Oncol. 2026;37(1):53-68; presented at ESMO 2025, Abstract 2383O. Figures from the presented slides.

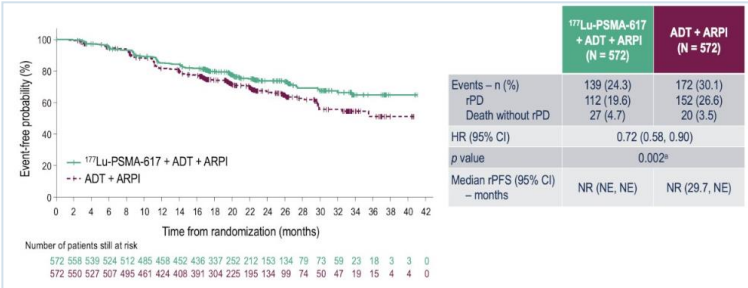
# PSMAddition — <sup>177</sup>Lu-PSMA-617 + ADT + ARPI

PSMA-positive mHSPC · N = 1144 · rPFS 0.72 · FDA approved Jul 2026

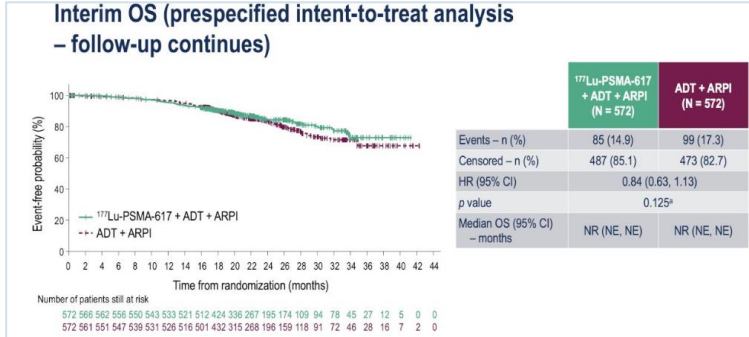
## STUDY DESIGN



## PRIMARY ENDPOINT: rPFS



## OVERALL SURVIVAL



Benefit consistent across volume and timing subgroups (HR 0.72–0.74)

Overall survival immature at interim (HR 0.84); crossover in 16% of the control arm

Requires PSMA PET, radiopharmacy access, and six visits over roughly eight months

Abbreviations: ADT, androgen deprivation therapy; ARPI, androgen receptor pathway inhibitor; CI, confidence interval; FDA, US Food and Drug Administration; HR, hazard ratio; OS, overall survival; PSMA, prostate-specific membrane antigen; q6w, every 6 weeks; rPFS, radiographic progression-free survival.

Tagawa ST, Sartor O, Piulats JM, et al. Presented at ESMO 2025, Abstract LBA6. Figures from the presented slides.

# How I Choose

1

## Synchronous high volume and fit for docetaxel?

Yes → triplet    No → ARPI doublet

2

## Does a biomarker redirect the choice?

BRCA2 · HRR · PTEN loss · PSMA-positive PET

3

## Which ARPI?

No efficacy signal separates them — choose on comorbidity, interactions, and cost

**What I never do: ADT alone.**

*Abbreviations: ADT, androgen deprivation therapy; ARPI, androgen receptor pathway inhibitor; BRCA, breast cancer susceptibility gene; HRR, homologous recombination repair; PET, positron emission tomography; PSMA, prostate-specific membrane antigen; PTEN, phosphatase and tensin homolog.*

Naqvi SAA, et al. ASCO GU 2025 — no significant efficacy differences among abiraterone, apalutamide, enzalutamide, and darolutamide.

# Tips to Achieve Shared Decision Making

- Assess and address patient values, preferred language, and health literacy
- Practice active collaboration
- Use evidence-based educational resources and decision aids
- Streamline the process into the daily workflow
- Manage expectations
- Consider health disparities — race and ethnicity, access to care, socioeconomic factors, and marital status

## THE SHARE APPROACH



Abbreviations: AHRQ, Agency for Healthcare Research and Quality; SHARE, Seek-Help-Assess-Reach-Evaluate.

The SHARE Approach: A Model for Shared Decision Making. Agency for Healthcare Research and Quality, Rockville, MD; content last reviewed September 2020.

# Open Prostate Cancer Trials at UC San Diego

Actively enrolling across the disease continuum — GU clinical trials list, 4 September 2026

| LOCALIZED / LOCALLY ADVANCED                                                                                              |  | BIOCHEMICAL RECURRENCE / OLIGOMETASTATIC                                               |  | METASTATIC HORMONE-SENSITIVE                                                                  |  |
|---------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------------|--|
| <b>EvoPAR-02</b><br>Adjuvant saruparib, BRCA-mutated, with RT + ADT (McKay)                                               |  | <b>INDICATE (EA8191)</b><br>PET-directed intensification after prostatectomy (Randall) |  | <b>ASPIRE (A032302)</b><br>Docetaxel addition to ADT + ARPI in mCSPC (Chen)                   |  |
| <b>SENTRY</b><br>Hormone therapy with targeted radiotherapy (Seibert)                                                     |  | <b>TERPS</b><br>Metastasis-directed RT in de novo oligometastatic disease (Seibert)    |  | <b>SWOG 1802</b><br>Systemic therapy ± definitive treatment of the primary (Bagrodia)         |  |
| <b>RAD-TARGET</b><br>Radiation dose tailoring by enhanced targeting (Seibert)                                             |  |                                                                                        |  |                                                                                               |  |
| <b>BEFORE</b><br>Bladder full or empty for pelvic radiotherapy (Seibert)                                                  |  |                                                                                        |  |                                                                                               |  |
| <b>FOLATE</b><br>Trimethoprim at initiation of ADT (Liss)                                                                 |  |                                                                                        |  |                                                                                               |  |
|                                                                                                                           |  |                                                                                        |  |                                                                                               |  |
| METASTATIC CASTRATION-RESISTANT                                                                                           |  |                                                                                        |  |                                                                                               |  |
| <b>PREDICT (A032102)</b><br>Biomarker-directed umbrella, all arms open                                                    |  | <b>Idate-Prostate01</b><br>Ifinatamab deruxtecan vs docetaxel                          |  | <b>KLK2-PASenger / PCR3001</b><br>Pasritamig ± docetaxel, KLK2 T-cell engager                 |  |
| <b>CONVERGE-01</b><br>Ac-225 rosopatamab, PSMA PET-positive                                                               |  | <b>MK-5684-01A</b><br>Opevesostat-based combinations                                   |  | <b>Valemetostat + darolutamide</b><br>EZH1/2 inhibitor combination                            |  |
| <b>TALENT</b><br>Talazoparib ± enzalutamide, HRR after abiraterone                                                        |  | <b>TIDAL</b><br>Tarlatab in DLL3-positive disease                                      |  | <b>GSK5471713 · ACE-232 · JANX014</b><br>First-in-human phase 1 studies                       |  |
|                                                                                                                           |  |                                                                                        |  |                                                                                               |  |
| Also enrolling: IRONMAN international registry · GU biospecimen collection · NIH precision genomics natural history study |  |                                                                                        |  | Referrals: 855-543-0555 · <a href="https://health.ucsd.edu/access">health.ucsd.edu/access</a> |  |

Abbreviations: ADT, androgen deprivation therapy; ARPI, androgen receptor pathway inhibitor; DLL3, delta-like ligand 3; HRR, homologous recombination repair; KLK2, kallikrein-2; PET, positron emission tomography; PSMA, prostate-specific membrane antigen; RT, radiotherapy.  
UC San Diego Moores Cancer Center GU clinical trials list, updated 4 September 2026. Trial availability and open cohorts change — confirm eligibility at the time of referral.

# Take-Home Messages

**1** Perioperative APA + ADT is now evidence-based in high-risk localized disease

**2** ADT + ARPI +/- docetaxel is the standard for metastatic disease

**3** Triplet vs ARPI doublet has never been randomized

**4** ARPI choice is about the patient, not efficacy

**5** Test at diagnosis: BRCA2, HRR, PTEN, PSMA PET

**6** ADT alone remains the biggest gap

Abbreviations: ADT, androgen deprivation therapy; APA, apalutamide; ARPI, androgen receptor pathway inhibitor; BRCA, breast cancer susceptibility gene; HRR, homologous recombination repair; PET, positron emission tomography; PSMA, prostate-specific membrane antigen; PTEN, phosphatase and tensin homolog.