

Diagnosing advanced prostate cancer (aPC)

aPC is prostate cancer that has spread beyond the prostate gland. It can be locally advanced (spread to regional lymph nodes) or metastatic (spread to distant parts of the body). aPC can be diagnosed through different physical exams, blood tests, and imaging.¹

Prostate-specific antigen (PSA) tests are critical for screening, monitoring, and risk assessment of aPC

PSA is a protein secreted by both normal and malignant cells in the prostate gland. A test to measure PSA can monitor tumor growth, response to treatment, and help detect recurrence of disease. For patients with aPC, routine PSA blood tests should be performed **every 3 to 6 months** to determine whether cancer is progressing.^{2,3}

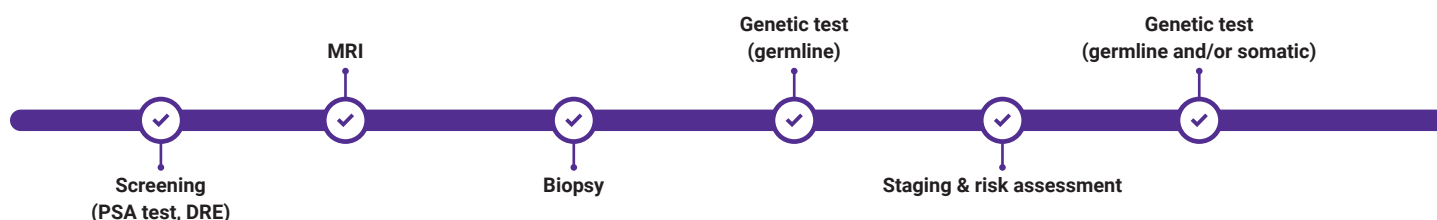
PSA level can be used in various ways as a risk-assessment tool in aPC. PSA terms to know include²:

PSA density	PSA velocity	PSA doubling time
➤ Calculated by dividing the PSA level by the prostate gland's volume (size) ➤ A higher PSA density may suggest greater likelihood of prostate cancer	➤ Rate at which PSA levels change over time ➤ Elevated PSA velocity may suggest rapidly growing cancer	➤ Calculated by determining the time it takes for PSA levels to double ➤ A shorter PSA doubling time may suggest a more aggressive cancer

If PSA levels are high after initial screening, further testing may be needed to determine the cause. If prostate cancer is suspected or diagnosed, tests such as **imaging (MRI, bone scan, CT scan, or PSMA-PET scan)** can be ordered to determine the spread of disease. **Biopsies** may be needed depending on imaging results. Advanced PSA testing methods such as Prostate Health Index, 4KScore®, and MyProstateScore® may be used to more accurately assess the need for biopsy.² After conducting these tests, you can more accurately assess the **stage and risk** of the cancer.²

Genetic testing in aPC can be helpful, if not already completed, to understand if genetic mutations are present that may be relevant for advanced disease risk or progression. Knowing mutation status can also help determine the best treatment approach.

Testing in aPC may closely follow the steps in the timeline as noted below, but can differ based on patient circumstances.



To learn more about the various types of diagnostic tests including imaging and biopsy, visit aPCcentral.com/staging



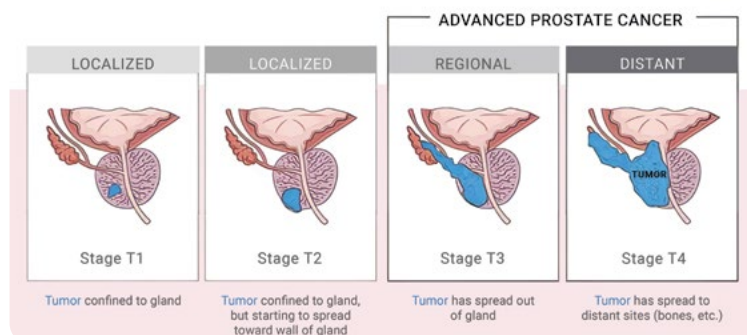
Grading & staging aPC

Grading and staging techniques are used to identify the severity of disease and determine treatment approach

Tools such as the **Gleason score**, **grade group**, and **staging** of the tumor can be used to establish how aggressive the cancer is.

Gleason score is determined by grading the 2 most common cell types (Gleason patterns) found during biopsy and can help evaluate risk. Scores range from 6-10, with 6 being more normal/lower risk and 10 being very abnormal/higher risk. The **grade group** system uses a range of 1-5 to grade tumor cells, with 1 being more normal/lower risk and 5 being very abnormal/higher risk.^{4,5,6}

Staging can be used to identify tumor spread by determining if cancer is still confined to the prostate gland or if it has spread beyond the gland. Tumor stages (T-stages) range from 1-4. See the image to the right for more information about each T-stage.^{7,8}



Using techniques such as PSA, Gleason score, and imaging in combination with others can help determine whether the cancer is metastatic and establish its stage. Stage T3 or T4 cancer indicates advanced disease.

Key Takeaways

- **PSA tests** can help identify recurrence and provide an indication of cancer growth. They should be regularly performed to monitor treatment response and progression in aPC^{2,3}
- **Imaging** can evaluate the spread of disease, while **biopsies** can help confirm cancer and determine the type of cells present, which reflects how aggressive the tumor is
- The **T-stage** of prostate cancer can be determined through a combination of tests which include PSA blood tests, biopsies, and imaging scans like MRI

If your patient with aPC hasn't had genetic testing yet, it's important to consider it. Genetic testing can reveal inherited cancer risks, and knowing mutation status can help guide treatment decisions.



Learn how genetic testing can help customize your patient's treatment plan at aPCcentral.com/testing



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