

Pretreatment Detection, Surveillance, and Staging of Prostate Cancer

Prostate cancer (https://www.radiologyinfo.org/en/info/prostate-cancer) is the second leading cause of cancer-related deaths in American men. Imaging tests and image-guided biopsies are used to help diagnose prostate cancer, for surveillance (watchful waiting) of low- and medium-risk prostate cancer, and for staging of medium- and high-risk prostate cancers.

For men with clinically suspected prostate cancer, with no prior biopsy or a negative transrectal ultrasound (TRUS)—guided biopsy, MRI-targeted biopsy (https://www.radiologyinfo.org/en/info/prostate-biopsy), TRUS-guided biopsy (https://www.radiologyinfo.org/en/info/prostate-biopsy), MRI pelvis (https://www.radiologyinfo.org/en/info/mri-abdomen-pelvis) without and with intravenous (IV) contrast, and MRI pelvis without IV contrast are usually appropriate.

For men with clinically established low-risk prostate cancer, MRI-targeted biopsy, TRUS-guided biopsy, MRI pelvis without and with contrast, and MRI pelvis without contrast are usually appropriate for surveillance.

For men with clinically established intermediate-risk prostate cancer, MRI-targeted biopsy, MRI abdomen and pelvis without and with contrast, MRI pelvis without and with contrast, CT abdomen and pelvis (https://www.radiologyinfo.org/en/info/abdominct) with contrast, PSMA PET/CT (https://www.radiologyinfo.org/en/info/pet) skull base to midthigh, CT chest (https://www.radiologyinfo.org/en/info/chestct) abdomen pelvis with contrast, and fluciclovine PET/CT skull base to mid-thigh are usually appropriate for surveillance and staging.

For men with clinically established high-risk prostate cancer, MRI abdomen and pelvis without contrast, MRI pelvis without and with contrast, bone scan (https://www.radiologyinfo.org/en/info/bone-scan) whole body, choline PET/CT skull base to mid-thigh, choline PET/MRI skull base to mid-thigh, CT abdomen and pelvis without contrast, fluciclovine PET/MRI skull base to mid-thigh, PSMA PET/CT skull base to mid-thigh, CT chest abdomen pelvis with IV contrast, fluciclovine PET/CT skull base to mid-thigh, and fluoride PET/CT whole body are usually appropriate for staging.

For more information, visit the Prostate Cancer (https://www.radiologyinfo.org/en/info/prostate-cancer) page.

— By Rachael Newman and Samantha L. Heller, PhD, MD. This information originally appeared in the *Journal of the American College of Radiology*.

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