

## 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/abdominect>) with contrast, PSMA PET/CT (<https://www.radiologyinfo.org/en/info/pet>) skull base to mid-thigh, 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*.

### Disclaimer

This information is copied from the RadiologyInfo Web site (<http://www.radiologyinfo.org>) which is dedicated to providing the highest quality information. To ensure that, each section is reviewed by a physician with expertise in the area presented. All information contained in the Web site is further reviewed by an ACR (American College of Radiology) - RSNA (Radiological Society of North America) committee, comprising physicians with expertise in several radiologic areas.

However, it is not possible to assure that this Web site contains complete, up-to-date information on any particular subject. Therefore, ACR and RSNA make no representations or warranties about the suitability of this information for use for any particular purpose. All information is provided "as is" without express or implied warranty.

Please visit the RadiologyInfo Web site at <http://www.radiologyinfo.org> to view or download the latest information.

**Note:** Images may be shown for illustrative purposes. Do not attempt to draw conclusions or make diagnoses by comparing these images to other medical images, particularly your own. Only qualified physicians should interpret images; the radiologist is the physician expert trained in medical imaging.

### Copyright

This material is copyrighted by either the Radiological Society of North America (RSNA), 820 Jorie Boulevard, Oak Brook, IL 60523-2251 or the American College of Radiology (ACR), 1891 Preston White Drive, Reston, VA 20191-4397. Commercial reproduction or multiple distribution by any traditional or electronically based reproduction/publication method is prohibited.

Copyright © 2025 Radiological Society of North America, Inc.