

“I did my own research and decided on proton therapy because it is not like regular radiation—it goes just to the area they need to treat. I’m so glad I made this decision!”

—Former ProCure patient, prostate cancer

ProCure



Proton therapy for precise, proven treatment of prostate cancer

If you have prostate cancer, you are not alone—over 200,000 men are diagnosed in the United States each year.¹ Like you, they want their cancer treated effectively, but don’t want side effects that can limit their lifestyles.

Proton therapy is good news for men with prostate cancer. Proton therapy is very precise and targets only the tumor site. This means that proton therapy is less likely to damage surrounding healthy tissue than typical radiation treatment.^{2,3} And that’s very important.

You can feel confident that proton therapy is an effective treatment choice for many cancer patients. It has been used at Massachusetts General Hospital and Loma Linda University Medical Center for more than 20 years with excellent results.^{3,4}

The more you learn, the more you will understand that proton therapy is effective in treating your cancer and may help preserve how you live your life.³ Taking charge of your health and learning about your options is an important first step.

Maximize treatment dose while minimizing risk of side effects



Proton therapy: Advanced radiation therapy with many advantages

What is proton therapy?

Proton therapy is an advanced form of radiation therapy that is precise in treating cancer. This means the tumor gets treated with higher doses of radiation and with less risk of damage to the surrounding healthy tissues.³

Proton therapy is an excellent tool for disease control in men with prostate cancer^{5,6,7}

What can you expect with proton therapy at ProCure?

- Proton therapy is given in a state-of-the-art center with specialized medical equipment



- Treatment and care are given by a team of specialized doctors, nurses and healthcare professionals
- Most patients do not feel pain or discomfort during treatment
- The time spent delivering proton therapy to the tumor is only a minute or two, but the entire treatment session will take about 15 to 30 minutes
- After treatment, you will most likely be able to go right back to your daily routine
- Most patients do not experience side effects during proton therapy treatment. If side effects occur, they are generally minor and manageable



“The atmosphere at the ProCure Center is absolutely wonderful. Everyone was great... and I had the satisfaction of knowing the proton therapy was attacking my cancer without damaging side effects.”

-Former ProCure patient, prostate cancer

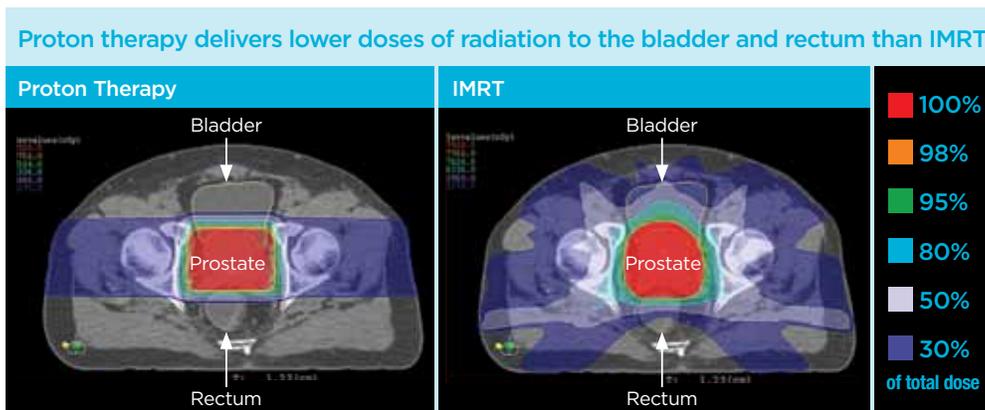
Proton therapy: The benefits of precision treatment

How is proton therapy different from standard radiation therapy?

While proton therapy and X-ray radiation therapy are equally effective at destroying cancer cells, there is an important difference. Like X-ray radiation, proton therapy attacks tumors by preventing cancer cells from dividing and growing. The difference is that protons go directly into the tumor and then stop. This allows proton radiation to target the tumor while reducing damage to surrounding healthy tissue⁸:

Proton therapy is more precise than standard radiation therapy,
so it is less likely to cause urinary or bowel problems²

In a study at the University of Florida Proton Therapy Institute that compared the distribution of radiation dose following proton therapy and intensity modulated radiation therapy (IMRT), proton therapy significantly spared the radiation dose to surrounding healthy tissues.^{2*} The images below show the amount and location of radiation that the body receives during treatment with proton therapy and X-ray radiation/intensity modulated radiation therapy (IMRT). Proton therapy (left) shows a smaller area of healthy tissue that received radiation compared to X-ray radiation/IMRT (right).⁷



IMRT=intensity modulated radiation therapy.

* Study Design: PR0G 95-09 (Proton Radiation Oncology Group/American College of Radiology 95-09 trial) was a randomized study with 10-year follow-up comparing conventional doses (70.2 Gy) with high doses (79.2 Gy) of combined proton-photon therapy in 391 patients with low or intermediate risk disease. The primary objective was to determine whether local failure at 5 years in the high-dose arm was reduced compared with the conventional-dose arm. A secondary objective was to determine the incidence of biochemical failure, as defined by American Society for Therapeutic Radiology and Oncology (ASTRO) criteria of 3 successive increases in prostate-specific antigen (PSA) level.¹

In a study conducted at the University of Florida Proton Therapy Institute, proton therapy delivered **on average 35% less radiation to the bladder and 59% less radiation to the rectum** compared with standard radiation therapy²

Other treatments for prostate cancer can include⁸:

- Intensity-modulated radiation therapy (IMRT), which is a type of radiation therapy using X-rays
- Prostatectomy, which physically removes the prostate gland
- Brachytherapy, which places radioactive materials in the prostate
- CyberKnife®, which is a type of radiation therapy using X-rays
- Hormonal therapy, which can be done with oral medication or by surgical removal of specific glands
- Immunotherapy, which requires a series of infusions
- Watchful waiting, which involves monitoring the patient's condition at scheduled intervals

The proton therapy difference is its precise method of targeting the tumor

Choosing the right treatment is an important decision so the more you know, the better.

Proton therapy: Precisely right for many men with prostate cancer

How do I know if proton therapy will work for me?

Most men with prostate cancer are good candidates for proton therapy. If you would like to speak with a physician, we can schedule a consultation with a radiation oncologist at a ProCure center for you. During the consultation, the radiation oncologist will work with you to determine if you will benefit from proton therapy. The radiation oncologists at ProCure use all forms of radiation to treat prostate cancer so they will provide you with an unbiased treatment recommendation that is best for you.

How many proton treatments will I receive?

Usually, treatments are given 5 days a week for 7 to 9 weeks, depending on the stage of your prostate cancer and other health factors.

Can proton therapy be used along with other kinds of cancer treatment?

Yes. Proton therapy can be used with many other kinds of cancer treatment, including hormone therapy, and/or as a follow-up to surgery.

Is proton therapy covered by my insurance?

Proton therapy is covered by Medicare and many private insurance providers. Each ProCure center has a financial counselor who is dedicated to guiding you through the insurance process. Please contact us if you have questions about coverage.



"I go back to almost every 'reunion' at the ProCure Center, and I can tell you there are a bunch of grateful patients who are very, very happy they made the decision to get treated with proton therapy."

—Former ProCure patient, prostate cancer

REMEMBER

Proton therapy is a good choice if you want:

- Precise, proven treatment
- Low risk of side effects
- Preservation of healthy tissue
- To maintain your active lifestyle

Visit procore.com to learn more.

References: 1. American Cancer Society. *Prostate Cancer*. Revised August 26, 2013. <http://www.cancer.org/cancer/prostatecancer/detailedguide/prostate-cancer-key-statistics>. Accessed December 10, 2013. 2. Vargas C, Fryer A, Mahajan C, et al. Dose-volume comparison of proton therapy and intensity-modulated radiotherapy for prostate cancer. *Int J Radiat Oncol Biol Phys*. 2008;70(3):744-751. 3. Slater JD. Clinical applications of proton radiation treatment at Loma Linda University: review of a fifteen-year experience. *Technol Cancer Res Treat*. 2006;5(2):81-89. 4. Trofimov A, Nguyen PL, Coen JJ, et al. Radiotherapy treatment of early-stage prostate cancer with IMRT and protons: a treatment planning comparison. *Int J Radiat Oncol Biol Phys*. 2007;69(2):444-453. 5. Zietman AL, DeSilvio ML, Slater JD, et al. Comparison of conventional-dose vs high-dose conformal radiation therapy in clinically localized adenocarcinoma of the prostate: a randomized controlled trial. *JAMA*. 2005;294(10):1233-1239. 6. Zietman AL. Correction: Inaccurate analysis and results in a study of radiation therapy in adenocarcinoma of the prostate. *JAMA*. 2008;299(8):898-899. 7. Zietman AL, Bae K, Slater JD, et al. Randomized trial comparing conventional-dose with high-dose conformal radiation therapy in early-stage adenocarcinoma of the prostate: long-term results from Proton Radiation Oncology Group/American College of Radiology 95-09. *J Clin Oncol*. 2010;28(7):1106-1111. 8. Katz A, Ferrer M, Suárez JF; Multicentric Spanish Group of Clinically Localized Prostate Cancer. Comparison of quality of life after stereotactic body radiotherapy and surgery for early-stage prostate cancer. *Radiat Oncol*. 2012;7:194.