

# Proton therapy effective prostate cancer treatment

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Proton therapy, a type of external beam radiation therapy, is a safe and effective treatment for prostate cancer, according to two new studies published in the January issue of the *International Journal of Radiation Oncology&#149;Biology&#149;Physics* (Red Journal), the American Society for Radiation Oncology's (ASTRO) official scientific journal.

In the first study, researchers at the University of Florida in Jacksonville, Fla., prospectively studied 211 men with low-, intermediate-, and high-risk [prostate cancer](#). The men were treated with [proton therapy](#), a specialized type of external beam [radiation therapy](#) that uses protons instead of X-rays. After a two year follow-up, the research team led by Nancy Mendenhall, MD, of the University of Florida Proton Therapy Institute, reported that the treatment was effective and that the gastrointestinal and genitourinary side effects were generally minimal.

"This study is important because it will help set normal tissue guidelines in future trials," Dr. Mendenhall, said.

In the second study, researchers from Massachusetts General Hospital in Boston, Loma Linda University Medical Center in Loma Linda, Calif., and the Radiation Therapy [Oncology](#) Group in Philadelphia performed a case-matched analysis comparing high-dose external beam radiation therapy using a combination of photons (X-rays) and protons with brachytherapy (radioactive seed implants).

Over three years, 196 patients received the external beam treatments. Their data was compared to 203 men of similar stages who received brachytherapy over the same time period. Researchers then compared the biochemical failure rates (a statistical measure of whether the cancer relapses) and determined that men who received the proton/photon therapy had the same

rate of recurrence as the men who received brachytherapy.

"For men with prostate cancer, brachytherapy and [external beam radiation](#) therapy using photons and protons are both highly effective treatments with similar relapse rates," John J. Coen, MD, a radiation oncologist at Massachusetts General Hospital in Boston, said. "Based on this data, it is our belief that men with prostate cancer can reasonably choose either treatment for localized prostate cancer based on their own concerns about quality of life without fearing they are compromising their chance for a cure."

Provided by American Society for Radiation Oncology

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