

Cancer Advances: Just Four Months of Hormone Therapy Can Delay Prostate Cancer Growth by Up to Eight Years with Fewer Side Effects

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Researchers have found that just four months of hormonal therapy before and with standard external beam radiation therapy slowed cancer growth—especially the development of bone metastases—by as much as eight years, and increased survival in older men with potentially aggressive (?high-risk?) prostate cancer. The study was published in the *Journal of Clinical Oncology* (JCO).

This ?neoadjuvant? hormonal therapy may allow men most at risk of developing bone metastases to avoid long-term hormonal therapy later on. Furthermore, the short-term hormonal therapy did not increase the risk of cardiovascular disease—a potential side effect of long-term hormonal therapy.

Hormonal therapy—called androgen deprivation therapy—lowers levels of cancer-fueling testosterone in the blood. It is an important treatment option for men with prostate cancer that continues to grow even after treatment with surgery, radiation therapy or chemotherapy, but has also been associated with side effects such as bone loss, osteoporosis, depression and an increase in cardiovascular risk factors (including blood lipids, abdominal obesity and a syndrome associated with diabetes).

Starting in 1987, researchers studied 224 men with high-risk prostate cancer who received hormonal therapy (the drugs goserelin and flutamide) before and during external beam radiation therapy, and 232 men with the disease who received radiation therapy alone. After 13 years, they found that compared with men who received radiation therapy alone, fewer men who received hormonal therapy died from prostate cancer (23 percent, versus 36 percent of the radiation-only group), had cancer that spread to other organs (35 percent versus 47 percent), or experienced a rise in their PSA levels (65 percent versus 80 percent). Moreover, the percentage of men who were free of cancer at 10 years was higher for the neoadjuvant hormonal therapy group (11 percent versus 3 percent).

Among men who received neoadjuvant hormonal therapy, there was up to an eight-year delay in the time it took 40 percent of patients to develop bone metastases compared with men receiving radiation alone. Men who develop bone metastases often require long-term hormonal therapy, which can increase their risk for side effects.

What Does This Mean for Patients?

This study demonstrates that the benefits of early, short-term hormonal therapy for men receiving radiation therapy for high-risk prostate cancer outweigh the risks. While four months of hormonal therapy isn't enough to cause significant side effects, the researchers found that it can significantly delay the development of bone metastases. The findings suggest that by taking a short course of hormonal therapy early on, patients may avoid having to take a longer course of treatment later. Patients with high-risk prostate cancer should discuss these findings with their physicians to determine if this approach is a viable treatment option for them.

Helpful Links

[Cancer.Net Guide to Prostate Cancer](#) [2]

[What to Know: ASCO's Guideline on Hormone Therapy for Advanced Prostate Cancer](#) [3]

[Cancer.Net Feature: Frequently Asked Questions About Radiation Therapy](#) [4]

Links:

[1] <http://www.jco.org>

[2] <http://www.cancer.net/patient/Cancer+Types/Prostate+Cancer>

[3]

<http://www.cancer.net/patient/Publications+and+Resources/What+to+Know%3A+ASCO%27s+Guidelines/What+to+Know%3A+ASCO%27s+Guideline+on+Hormone+Therapy+for+Advanced+Prostate+Cancer>

[4] <http://www.cancer.net/patient/All+About+Cancer/Cancer.Net+Feature+Articles/Treatments%2C+Tests%2C+and+Procedures/Frequently+Asked+Questions+About+Radiation+Therapy>