

## **Androgen Deprivation Therapy for Prostate Cancer Increases Risk of Colorectal Cancer**

**Source:** *Journal of the National Cancer Institute*

Colon cancer also known as colorectal cancer starts in the colon (large intestine) or the rectum (end of the colon). With 655,000 deaths worldwide per year, it is the third most common form of cancer and the second leading cause of cancer-related death in the Western world. In the United States, it is the fourth most common cancer in men and women. Caught early, it is often curable. It is more common in people over 50, and the risk increases with age.

Male hormones are called androgens and primary among them is the natural hormone testosterone, which is produced in the testes, ovaries and adrenals. Hormone therapy also called androgen deprivation therapy (ADT) or androgen suppression therapy is used to reduce male hormones. Prostate cancer tends to shrink or grow more slowly when androgen levels are lowered but ADT does not cure the cancer. ADT is widely used in the community setting to treat men with clinically localized prostate cancer, prostate-specific antigen recurrence after radical prostatectomy, locally advanced disease, lymph node metastases, and asymptomatic metastatic disease.

A recent study published in the *Journal of the National Cancer Institute* found that men treated with hormone-based therapy (androgen deprivation) for prostate cancer had a significantly increased risk of colorectal cancer. The study included 107,859 men in the SEER-Medicare database who were diagnosed with prostate cancer between 1993 and 2002, who were followed up through 2004. The results revealed that men who received androgen deprivation therapy had a 30 to 40 percent increased risk of colorectal cancer when compared to those who did not receive hormone therapy. The researchers found that the longer men received hormone therapy, the higher their risk of developing colorectal cancer. Furthermore, men who had their testicles removed, a procedure called orchiectomy, had the highest rates of colorectal cancer. The risk of developing colorectal cancer was still low, at less than one percent per year, even among orchiectomy patients. This information suggests that while androgen deprivation is very beneficial to some men with advanced prostate cancer, it may not be the best therapy in cases when its benefit is not clear.<sup>1</sup>

<sup>1</sup> Gillessen S, Templeton A, Marra G, et al. Risk of colorectal cancer in men on long-term androgen deprivation therapy for prostate cancer. *J Natl Cancer Inst.* Dec2010;102(23):1760-70.