

## **COMMON TREATMENT FOR OSTEOPOROSIS MAY HELP MEN WITH PROSTATE CANCER SUFFERING FROM BONE LOSS**

**SAN FRANCISCO , Feb. 25** – Men with prostate cancer who experience bone loss from cancer treatment could benefit from a weekly oral therapy commonly given to women with osteoporosis, according to a study presented by the University of Pittsburgh Medical Center (UPMC) at the American Society of Clinical Oncology Prostate Cancer Symposium, Feb. 24 to 26 at the San Francisco Marriott. The study, abstract number 139, will be featured in a press program at the meeting, 7:30 a.m., Sunday, Feb. 26.

“In previous studies, we have determined that men who receive androgen deprivation therapy, a frequently used treatment for prostate cancer, suffer from severe drops in bone mass and are at an increased risk for fracture,” said study principal investigator Susan Greenspan, M.D., professor of medicine, University of Pittsburgh and director, Osteoporosis Prevention and Treatment Center, UPMC. “In an attempt to mitigate these effects, we gave men using this therapy a once-weekly oral agent called alendronate that is commonly used to treat osteoporosis. We found that men who received it had significantly increased bone mass compared to those who did not receive the therapy.”

The study included 112 men with prostate cancer with an average age of 71. After an average of two years androgen deprivation therapy for prostate cancer, only 9 percent of the men had normal bone mass, while 52 percent had low bone mass and 39 percent developed osteoporosis. To study the effect of alendronate on these men, they were randomized into two groups to receive either alendronate once a week through an orally administered pill or a placebo. At one year follow-up, bone mass in the spine and hip increased significantly in the men treated with alendronate, 4.9 percent and 2.1 percent respectively. By comparison, men in the placebo group had significant losses of bone mass in the spine and hip, 1.3 percent and .7 percent respectively. In addition, the therapy was well-tolerated and easily administered.

“Since most men with prostate cancer remain on androgen deprivation therapy for an indefinite amount of time, bone loss can be a serious and long-term side effect from therapy,” said Joel Nelson, M.D., co-author of the study and professor and chairman of the department of urology at the University of Pittsburgh School of Medicine. “With more than 230,000 men being diagnosed with prostate cancer each year, the addition of alendronate therapy could help to prevent the incidence of debilitating bone fractures.”

Androgen deprivation therapy works by depriving the body of testosterone, an androgen hormone that increases the growth of prostate tumors. However, testosterone also is essential to maintaining bone mass in men. While doctors have been using this type of therapy for more than a decade to treat men with late-stage metastatic prostate cancer, they have begun using it more recently in men with earlier-stage disease and for longer periods of time; this increased exposure increases the risk for developing osteoporosis.

“These results suggest to us that men who are under treatment for prostate cancer should be encouraged to get a bone density test and that those at risk could benefit greatly from bone-preserving therapy,” said Dr. Greenspan.

