

To: All Patients on Hormonal Treatment for Prostate Cancer (Lupron/Zoladex)

Recent studies and literature have raised the possibility of the development of osteoporosis in patients who are on chronic hormonal therapy such as Lupron and Zoladex. You may have heard of these findings either on the news or from other physicians.

Although we have never seen nor had any problems associated with this in our practice, the present recommendation is for patients on long-term treatment with Lupron/Zoladex to supplement their diet with Calcium and Vitamin D.

Therefore, our present recommendation is for patients to supplement their diet with Calcium 1200mg a day and Vitamin D 600 units per day. This has been shown to decrease the potential problems associated with osteoporosis.

If there are any specific questions, please feel free to ask the doctor.

Hormonal Therapy for Prostate Cancer

Hormonal therapy is one option available for prostate cancer treatment. It is important to discuss this therapy and other possible treatments with your doctor. Here are the straight answers to questions that men often ask about hormonal therapy.

When is hormonal therapy used to treat prostate cancer?

Hormonal therapy is most often used to treat cancer when it has spread beyond the prostate or has recurred (come back) after initial treatment. Newer approaches to its use include starting hormonal therapy before or after radiation treatment. Research studies are also looking at the usefulness of hormonal therapy prior to surgery to shrink the tumor as well as after surgery to improve the surgery's effect.

How long will I need to be on hormonal therapy?

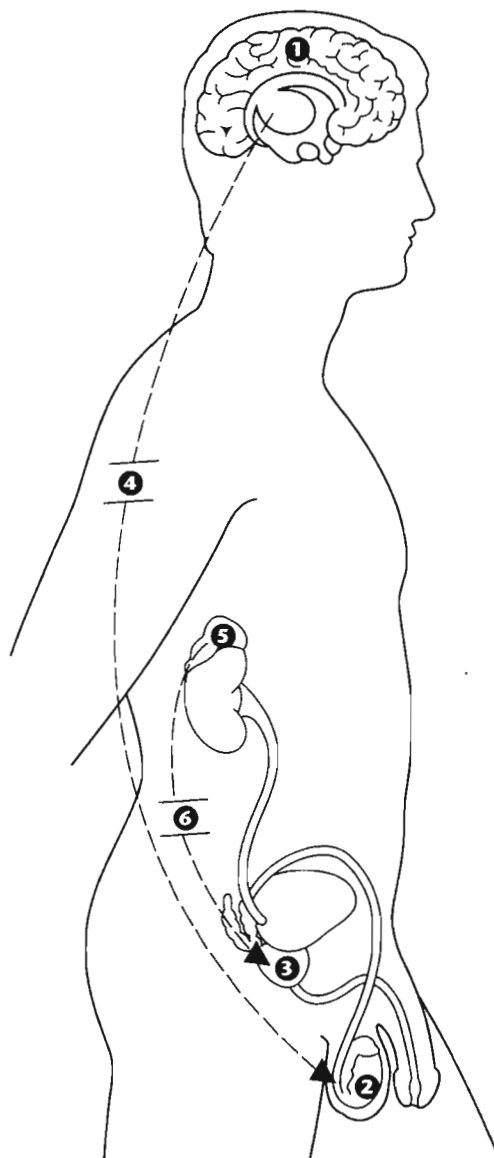
When used to treat advanced prostate cancer, hormonal therapy is continued until it is no longer effective in treating prostate cancer. A rising PSA or the presence of symptoms such as slowing or weakening of the urinary stream, frequent urination, blood in the urine, swollen lymph nodes in the groin area, and pain in the pelvis, spine, hips, or ribs are signals that some cancer cells may be immune to the hormonal therapy.

The exact length of time any one hormonal therapy will work differs from man to man but is usually from months to years. Taking hormonal therapy is often a lifelong commitment. Intermittent hormonal therapy involves stopping the treatment after a man's PSA level has dropped markedly and then restarting the therapy if the PSA level increases. This newer approach to hormonal therapy is still currently under investigation.

A closer look at how hormonal therapy works...

Hormone-dependent prostate cancer cells use the male hormone testosterone to multiply and grow. The goal of hormonal therapy is to block testosterone from reaching cancer cells.

- 1 BRAIN**
Brain sends chemical signals to the testes.
- 2 TESTES**
Testes receive signals from brain and are stimulated to make testosterone.
- 3 PROSTATE**
Hormone-dependent prostate cancer cells use testosterone to grow and multiply.
- 4 LHRH ANALOGS**
One type of hormonal therapy uses medicines called LHRH (luteinizing hormone-releasing hormone) analogs to block the signals being sent from the brain to the testes. As a result, the testes no longer make testosterone.
- 5 ADRENAL GLANDS**
Adrenal glands, which sit above the kidneys, make another male hormone, androgen, which the body converts to testosterone.
- 6 ANTIANDROGENS**
Another type of hormonal therapy, antiandrogens, blocks the production of androgens by the adrenal glands.



What are the possible side effects of hormonal therapy for prostate cancer?

Side effects of hormonal therapy depend upon the type of hormonal therapy used. As with any treatment for prostate cancer, it is important to talk with your doctor about the side effects you may experience.

LHRH analogs may cause:

- Hot flashes and sweating
- Decreased or absent sexual desire (libido)
- Impotence

LHRH analogs cause a temporary increase in testosterone production and therefore may cause a temporary increase in tumor size for 1 to 2 weeks before testosterone falls to very low levels.

Antiandrogens may cause:

- Nausea
- Vomiting
- Diarrhea
- Breast enlargement