

Prostate Markers

Testosterone

Monitoring Disease

Testosterone monitoring, through blood tests, is commonly done for patients with prostate cancer. It is an important marker in the treatment of advanced prostate cancer, and is most commonly used to monitor advancing disease and to provide a doctor with information on a patient's response to prostate cancer treatments like androgen deprivation therapies.

Science:

• A serum testosterone should be measured in prostate cancer patients:

1. Before the initiation of androgen deprivation therapy (ADT), often called hormone therapy, treatment.
2. Along with the first PSA measurement two months after the start of androgen deprivation therapy (ADT)
3. Every six months or with each re-administration of LHRH therapy, whichever is more frequent
4. When the PSA level increases
5. When switching treatment options

• During ADT, serum testosterone measurements should be made using LC/MS-MS assays in accordance with the Endocrine Society and the same clinical laboratory should be used for testing for consistency.

Results:

In patients being treated for advanced prostate cancer with ADT, a serum testosterone levels under 50ng/dL are important and affect the patient's outcome. Clinical decisions to change treatment regimens should be made when the serum testosterone levels fails to decrease to the castrate range before reclassification of the disease as castrate resistance prostate cancer (or progressing).