Zytiga/abiraterone acetate or Xtandi/enzalutamide
What is the Difference?

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**DISCLAIMER:** Please recognize that I am not a Medical Doctor. I have been an avid student researching and studying prostate cancer as a survivor and continuing patient since 1992. I have dedicated my retirement years to continued research and study in order to serve as an advocate for prostate cancer awareness, and, from a activist patient’s viewpoint, to voluntarily help patients, caregivers, and others interested develop an understanding of prostate cancer, its treatment options, and the treatment of the side effects that often accompany treatment. There is absolutely no charge for my mentoring – I provide this free service as one who has been there and hoping to make your journey one with better understanding and knowledge than was available to me when I was diagnosed so many years ago. Readers of this paper must understand that the comments or recommendations I make are not intended to be the procedure to blindly follow; rather, they are to be reviewed as my opinion, then used for further personal research, study, and subsequent discussion with the medical professional/physician providing your prostate cancer care.

**FIRST, IMPORTANT TO BE AWARE:** IF BEING PRESCRIBED EITHER ENZALUTAMIDE/XTANDI OR ABIRATERONE ACETATE/ZYTIGA
If you are a patient also experiencing cardiovascular issues, the toxicity of the foregoing medications may be detrimental to those issues. Please read the following and discuss with your treating physician:

New Hormonal Agents for Prostate Cancer May Increase Risk of Cardiotoxicity

http://tinyurl.com/o8hmcty

Also to be aware: In Prostate Cancer, Xtandi (enzalutamide) Sparks More Fatigue and Pain Than Zytiga (abiraterone acetate w/prednisone) – Read more at:
http://tinyurl.com/gmxh3re

A basic explanation of the difference between Zytiga/abiraterone acetate and Xtandi/enzalutamide (formerly MDV3100):

Zytiga is an antigen biosynthesis inhibitor, while Xtandi is an androgen receptor inhibitor.
Zytiga is a prescription medicine that is used along with prednisone. Zytiga is used to treat men with castration-resistant prostate cancer that has spread to other parts of the body. CYP17 is an enzyme that plays a central role in allowing the body to produce testosterone and cholesterol. Zytiga is an irreversible inhibitor of CYP17. When Zytiga binds to this enzyme, it is permanently disabled and the production of testosterone is blocked in the testicles, in the adrenal glands, and within cancer cells. In the absence of this “fuel,” apoptosis/cell death can occur. Zytiga requires accompaniment by the steroid Prednisone to reduce the chances of fluid retention, raised blood pressure, or a drop in the level of potassium in your blood that can result with abiraterone/Zytiga treatment.

Xtandi

Is a prescription medicine used to treat men with prostate cancer that no longer responds to a medical or surgical treatment that lowers testosterone and that has spread to other parts of the body. Xtandi has a mode of action that is intended to block the binding of testosterone/androgen to the androgen receptor and thus interfere with the process of testosterone access to the cancer cell nucleus via androgen receptors that otherwise drives tumor cell growth. As with Zytiga, in the absence of this “fuel,” apoptosis/cell death can occur.

Ideally, it would appear that prescribing both these medications, thus depriving testosterone access to or production within cancer cells, would more effectively bring about apoptosis/cell death.

Zytiga must be taken on an empty stomach requiring no food from two hours before and one hour after the medication. This medication, taken orally with water one time daily as four 250mg tablets, also requires taking the steroid Prednisone, a 5mg tablet twice a day to guard against hyperkalemia, hypertension and liver damage. I have personally found that taking Zytiga upon arising in the morning was the best time for me, since no food was consumed the two hours previously (I keep the container and water at bedside). Then, with washing up, getting dressed, and “up and about” the hour to wait before having any food or other medication passes by quickly. When taking prednisone, the first 5mg prednisone tablet can be taken at breakfast, then the second one later in the day. Please note: I have personally switched from Prednisone to a single, once a day, 0.5mg
Dexamethasone tablet for reasons explained here: “Dexamethasone a Better Partner for Abiraterone Than Prednisolone” (aka Prednisone)  

Xtandi, however, does not require the accompaniment of prednisone and can be taken with or without food. Xtandi is usually prescribed to be taken orally, once a day, as four 40mg capsules (160 mg per day); likely better to take around the same time daily.

More to know about Zytiga: http://tinyurl.com/d5jrg8y

More to know about Xtandi: http://www.drugs.com/xtandi.html

It would appear that a blood draw to test one’s Circulating Tumor Cells (CTC) for an androgen receptor variant known as AR-V7 prior to beginning Xtandi/enzalutamide is reasonable since should this variant be present it has been found that this medication will less likely be effective.

Read on: Possible Biomarker for Enzalutamide in Prostate Cancer http://tinyurl.com/mnkxjzs

The foregoing information comes from the OncoTherapy Network website, so if unable to open, your can register for free.

A recent posting in the “Asco Post” reports: “Researchers believed that galeterone could be effective against castration-resistant prostate cancer because it disrupts the androgen receptor signaling pathways that are involved in the cancer, and preclinical work has shown it is active against the AR-V7 variant.” This paper also indicates that this variant can disturb the effectiveness of Zytiga/abiraterone acetate as well. This would indicate that, again, a check of one’s Circulating Tumor Cells (CTC) for the presence of this variant would be reasonable before beginning either Zytiga or Xtandi. See:
