Who We Are

Imagine a world with zero prostate cancer deaths – we at ZERO work each and every day with that vision in mind. We are the destination for taking action to end prostate cancer and making prostate cancer a national priority. By providing educational resources, supporting scientific research, and offering patient support programs including financial assistance, we strive to positively impact the lives of men and families fighting this disease.

Our Mission

ZERO’s mission is to end prostate cancer. We will save lives and stop pain and suffering by advancing research, encouraging action, and providing education and support to men and their families.

A Message from Dr. Alicia Morgans

Dear Friends,

On behalf of everyone at ZERO, I’m pleased to provide you with this newsletter. This year, it is estimated that more than 220,000 men will learn that they have prostate cancer, and nearly 28,000 will die from the disease. Fortunately there are treatments available to men living with advanced prostate cancer to help them live longer and more productive lives than ever before. In addition to the medical care you receive from your physician, there are many resources for support available through organizations like ZERO, ensuring that you do not have to face prostate cancer alone.

If you have recently been diagnosed with advanced prostate cancer, learn as much as you can about your treatment options. Knowledge truly is power, and recognizing that you can contribute to your treatment plan is key. Use what you have learned to talk to your doctor about all of your options for advanced prostate cancer treatment, and work together as a team to make a long term plan. Your opinions and priorities matter, but unless you share them with your treatment team, they may not be able to fully help you achieve your goals.

I encourage you to share this newsletter, learn more about ZERO, and join with us to make the voices of men with prostate cancer heard.

Wishing you and your family a wonderful holiday season.

Alicia Morgans
MD, MPH,
Genitourinary Oncologist,
Assistant Professor of Medicine, Vanderbilt-Ingram Cancer Center and Chair, ZERO Medical Advisory Board

Advanced Prostate Cancer: An Overview of the Disease

The term advanced prostate cancer covers several different scenarios, all referring to prostate cancer that has moved beyond the prostate and can be managed and controlled but most likely not cured. There are multiple ways to manage advanced prostate cancer.

See the table for examples of treatments used in advanced prostate cancer. (See page 2)

Biochemical Recurrence – the prostate cancer has returned after initial treatment, but the only sign of return is a rising PSA. The cancer cells have not grown large enough to be seen on imaging studies like bone scans or CT-scans. Roughly 15-30 percent of men thought cured after localized treatment will experience a biochemical recurrence. Patients should work with their doctor to manage the rising PSA as each patient’s case will be different.
Advanced Prostate Cancer: An Overview of the Disease (From page 1)

Castration-Resistant Prostate Cancer – prostate cancer that no longer responds solely to hormone therapy (also called androgen deprivation therapy or ADT), and the PSA begins to rise signaling disease progression. Treatment is usually managed by adding different types of medicines to ADT, including additional hormonal therapies, chemotherapy, or immunotherapy.

Metastatic Prostate Cancer – the prostate cancer has moved beyond the prostate to another organ such as the bones, lymph nodes, or liver. When metastatic prostate cancer is a new diagnosis in a patient who has not been recently treated with ADT, ADT with or without chemotherapy is the standard treatment approach. When patients who have been on ADT have a new diagnosis of cancer that has moved beyond the prostate to another organ, this typically indicates the development of castration-resistant prostate cancer. The treatments available include additional hormonal therapies, chemotherapy, or immunotherapy.

Metastatic Castration-Resistant Prostate Cancer (MCRPC) – the prostate cancer has moved beyond the prostate to another organ and is no longer responding to hormone therapy alone. There are several options available for men with castration-resistant prostate cancer, including hormonal therapies, immunotherapy, chemotherapy, and radiopharmaceuticals.

<table>
<thead>
<tr>
<th>TREATMENT</th>
<th>TYPE</th>
<th>DISEASE STATE</th>
<th>EXAMPLES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hormone Therapy</td>
<td>Anti-androgen</td>
<td>Biochemical recurrence (not Xtandi), metastatic prostate cancer (not Xtandi), CRPC (not Xtandi), mCRPC</td>
<td>Xtandi® (enzalutamide), Casodex® (bicalutamide), Flutamide, Nilandron® (nilutamide)</td>
</tr>
<tr>
<td>GnRH agonist or antagonist</td>
<td></td>
<td>Localized prostate cancer, biochemical recurrence, metastatic prostate cancer, CRPC, mCRPC</td>
<td>Eligard® (leuprolide acetate), Firmagon (degarelix), Lupron® (leuprolide acetate), Zoladex® (goserelin acetate)</td>
</tr>
<tr>
<td>Steroid synthesis inhibitors</td>
<td></td>
<td>CRPC (not Zytiga), mCRPC</td>
<td>Ketoconazole, Zytiga® (abiraterone acetate)</td>
</tr>
<tr>
<td>Immunotherapy</td>
<td></td>
<td>mCRPC</td>
<td>Provenge® (sipuleucel-T)</td>
</tr>
<tr>
<td>Chemotherapy</td>
<td></td>
<td>mCRPC</td>
<td>Jevtana® (cabizitaxel), Taxotere® (docetaxel)</td>
</tr>
<tr>
<td>Radiation</td>
<td>Radiopharmaceuticals</td>
<td>mCRPC</td>
<td>Xofigo® (Radium-223 dichloride), Samarium, Strontium</td>
</tr>
</tbody>
</table>

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STAY IN TOUCH WITH ZERO!
Visit our website to sign up to receive our e-newsletter, find events and programs in your community, and lend your voice to share your prostate cancer journey.

www.zerocancer.org

Be on the lookout for our second newsletter edition, coming in Summer 2016!
Clinical Trials: Q&A with Dr. Tomasz Beer

What is a clinical trial?
A clinical trial is a medical research study inviting patients with cancer to receive their treatment as study participants. In advanced prostate cancer, most clinical trials investigate a potential new drug treatment. Trials also study new doses, sequencing, or combinations of different treatments. In a clinical trial, data are collected to allow researchers to learn from a patient’s treatment and share anonymous information with others.

What are the benefits of participating in clinical trials?
Participating in a clinical trial offers you access to the latest in innovative care. You may be getting tomorrow’s treatment today. Patient care in a clinical trial is carefully planned, attentive, and overseen closely by investigators as well as independent organizations charged with protecting patients’ safety. Additionally, some people find it gratifying to participate in research that may result in the next breakthrough for prostate cancer treatment.

What are the risks of participating in clinical trials?
All clinical trials have risks as do all prostate cancer treatments. Not all new treatments are better and you are not guaranteed that the trial drug will be more effective or safer than other FDA-approved options. Side effects of treatments can occur, and the treatments tested may prove less effective or more toxic than a standard treatment would have been.

Will I receive a placebo?
Most prostate cancer clinical trials do not use placebos unless they are given along with an active drug. When placebos are used alone – that would mean that there is not a standard treatment with a known benefit in this situation. This may be the case with the most advanced forms of prostate cancer when standard treatments have been exhausted. It may also be the case in early stage disease that is slow enough that we would normally observe without treatment. It is important to ask about placebos with the physician or study nurse working on any trial you consider.

Where can I learn more about clinical trials?
Visit ZERO’s website, order a copy of their clinical trials brochure, or visit the National Cancer Institute’s website at www.clinicaltrials.gov.

Bone Health and Prostate Cancer
Bone health is important to all men as they age, and is particularly important for men with advanced prostate cancer as their risk for bone complications increases because of the disease and treatments. When prostate cancer spreads, or metastasizes, it frequently travels to the bone. Hormonal therapy for prostate cancer can lead to bone loss by decreasing testosterone. Both metastases and hormone therapy can weaken the bone, increasing a man’s risk of fracture and pain.

(Continued on page 4)
Bone Health and Prostate Cancer (From page 3)

Fortunately there are treatments available today to manage complications from bone metastases, prevent bone loss, and improve bone density.

Bone Metastases

Up to 90 percent of men with advanced prostate cancer will develop bone metastases, also called ‘bone mets.’ This occurs when prostate cancer spreads outside of the prostate to bones. Bone metastases can be very painful and make everyday activities difficult, though some men do not feel pain despite widespread bone metastases. Bone metastases increase the risk of skeletal complications which can require additional treatments. Treatment options for men with painful bone metastases include:

• Xofigo® (Radium-223) – also extends life
• External radiation directed at one specific point
• Samarium
• Strontium

Bone Loss

Hormonal treatment with androgen deprivation therapy (ADT), particularly long-term treatment, weakens the bones over time. It reduces a man’s testosterone which upsets the balancing act of bone formation and breakdown, tipping the scales toward more bone breakdown and weaker bones. Without testosterone, bones can become weak and break more easily.

Bone loss can be prevented and bone density improved over time with medicines and lifestyle changes. Strive for a healthy diet and include weight bearing exercises in your daily routine.

Treatment options to prevent bone loss or restore bone strength include:

• Bisphosphonates, zolendronic acid or Zometa®
• Denosumab or Xgeva®

Col. Paul Taylor was set to deploy to Afghanistan in 2012 when he was diagnosed with stage IV prostate cancer. The 41-year-old husband and father to three girls tackled the disease head on, learning all he could and starting a treatment plan consisting of hormone therapy, chemotherapy, and surgery while continuing to remain in command of a squadron with over 700 soldiers. “To battle this disease, my 20 years of military training kicked in almost immediately. I was equipped to tackle this problem the same way I’ve tackled so many others,” said Taylor. “I sought a second opinion, did my own research on my disease, and finally looked for the most aggressive treatment options available to me.”

Paul credits the support of his wife and children, along with their church, families, Army friends, soldiers, and peers as inspiration for getting him through his battle, especially on his toughest days. He now advocates for prostate cancer awareness, encouraging men to get tested and take control of their health - for their families, and for themselves.

“Cancer is a part of my life now, but I work every day to ensure that it remains only a small part of it...Now, I do my best to provide support to other prostate cancer patients by serving as a peer counselor, and working as an advocate with ZERO. I enjoy sharing my story, and in turn, I learn just as much from other patients as I hope they are learning from me.”

Paul serves on ZERO’s Board of Directors and is frequently a spokesman and advocate for educating other men and families on prostate cancer.