# NEW DEVELOPMENTS IN THE USE OF

## TAXOTERE

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Taxotere is the most widely-used chemotherapeutic agent for treating prostate cancer. It is also the most widely-used agent for breast and lung cancer. Prostate Oncology Specialists has been using Taxotere since 1998. Two large multicenter studies completed in 2004 demonstrated longer survival for men with hormone resistant prostate cancer (ROYAL) when treated with Taxotere. Recently, another large randomized trial concluded that Taxotere is even more effective when patients with metastases begin Taxotere before hormone resistance develops.

### What is Taxotere?

Taxotere is an intravenous chemotherapy which is a "plant alkaloid." It works by interfering with cell division causing cell death. It also inhibits proangiogenic factors, such as VEGF, (vascular endothelial growth factor) which are neccesary for tumor growth. Interestingly enough, Taxotere is synthetically derived from a substance that is extracted from the needles of the European yew tree, Taxus Baccata.

# Two Philosophies of Use for Taxotere

Taxotere accomplishes two basic roles in prostate cancer. 1)
To treat metastatic disease, with or without other agents, such as Carboplatin, Xeloda or Avastin. 2) As a preventative agent before the cancer becomes metastatic. Testosterone inactivating pharmaceuticals (TIP) are usually the first line of defense for men with high-risk disease (AZURE). However, in some situations TIP alone can prove to be insufficient. Adding Taxotere to TIP is called "adjuvant chemotherapy." →

Not many people know that it was complications from radiation that ultimately caused Lloyd's death in 1998. But that was fourteen years after being given a death sentence with six months to live. After fourteen years of radiation, his bladder and bowel were severely damaged, ultimately leading to multiple bouts of sepsis originating from the super pubic catheter. Dr. Labrie's hormone therapy is what kept Lloyd alive an additional 14 years, allowing him to create all the resources that are now readily available through PAACT."

Lloyd helped establish over 140 cryosurgery sites in the U.S. which provided cryosurgical ablation of the prostate as an alternate to radical prostatectomy. PAACT was also instrumental in introducing legislation in some states mandating full disclosure by physicians of all available options for detection, diagnosis, evaluation, and treatment of prostate cancer. Working with other concerned and interested advocacy groups, he supported similar efforts at the national level.

At Lloyd's memorial service Dr. Stephen Strum, his close friend, was quoted, "Lloyd worked out of his basement, 7 days a week, 20 hours a day directing confused, frightened men and their loved ones — their wives, girlfriends, and children. Lloyd was a oneman powerhouse, as stubborn as a mule, set in his ways, willing to lock horns with anyone, anywhere and anytime. This was the outer crust of Lloyd Ney — tough, irascible. But inside this crust was a soft bread, the uniqueness of Lloyd Ney."

PAACT's pioneering effort in prostate cancer advocacy paved the way for many subsequent prostate cancer newsletters, support groups, books, pamphlets, magazines, and information available on the internet.

When thinking of the incredible impact of all the support groups and advocacy organizations and all the good they do, Lloyd Ney - the pioneer, the great trailblazer, has to be given credit as the guy who started it all.  $\square$ 

### To Learn More About PAACT – see www.PAACTUSA.org

- 1. http://www.forbes.com/sites/robertpearl/2014/07/31/when-money-motivates-cancer-treatment-options/
- 2. http://www.paactusa.org/about-us/founder



# RESULTS FOR THE 2014 PCRI AND ZERO CANCER RACE IN LOS ANGELES, CA.

### Thank you to all who participated!

### **5K Winners**

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### 1. Stephen Tippett

### 2. Lacue Kamani

### 3. Ryan Sheperd

### 15k Winners

### 1. Brianna Calvert

- 2. Sharon Moreno
- 3. Mario Trujillo

### **Largest Teams:**

- 1. King's Hawaiian 84
- 2. Team Velarde 32
- 3. Team Jeremy 18

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### Rationale for Considering Adjuvant Taxotere

Adjuvant Taxotere is standard for lung cancer and breast cancer patients. In fact, the failure to administer adjuvant Taxotere to young women with early stage breast cancer is considered malpractice. Numerous studies have proved that adjuvant chemotherapy reduces relapse rates and improves long-term survival.

Studies testing the premise that adjuvant Taxotere in men with prostate cancer who have **newly-diagnosed high-risk disease** (AZURE) are presently ongoing. Because Taxotere is very effective against advanced prostate cancer, we expect these studies will ultimately prove that Taxotere has the same ability to reduce relapse rates and extend survival in men with prostate cancer as it does with lung and breast cancer. Since studies take time to complete, final results may not be tabulated for several years. In the meantime, men with high-risk disease have to decide whether or not to use adjuvant Taxotere without the confidence of a definitive study that proves its effectiveness.

Without any conclusive scientific support, the decision to use adjuvant Taxotere is based on a risk-benefit analysis. On the negative side, 4-6 cycles of 3-week Taxotere has significant side effects (discussed later in this article). Also, there is always the possibility that studies will ultimately show that the benefit is too small to justify adjuvant Taxotere's routine use. But, on the other hand, presuming that Taxotere does indeed have added anticancer benefits when paired with hormone therapy, it would be a shame for men with high-risk disease to miss out on its benefits. In addition, until studies are completed, the degree of improvement in cure rates is a speculative issue. However, if the breast cancer and colon cancer studies can be used as a metric, a 10% absolute improvement in cure rates might be anticipated with adjuvant Taxotere for men with AZURE.

### A New Study In Men With Advanced Disease

One new protocol that does validate the earlier use of Taxotere has been recently reported in a study of 800 men with **hormone-sensitive**, **metastatic prostate cancer** (ROYAL). [1] All the men in this study were initially treated with TIP, a standard approach. However, half of the men were administered Taxotere at the same time as TIP, rather than waiting until the disease became resistant to TIP. The results of the study showed that the men who received immediate Taxotere had substantially better survival rates. On the basis of this compelling study, most prostate cancer experts have concluded that waiting to start Taxotere until after TIP becomes ineffective represents an outdated and ineffective approach to treating prostate cancer.

# Taxotere Protocols Can Vary

Taxotere is administered intravenously, most commonly, every three weeks with one large dose of 75 mg/m2. Alternative methods of administration are lower doses 25 mg/m2 weekly or a slightly larger dose of 50 mg/m2 every two weeks. [2,3] There are advantages and disadvantages to the different schedules. A single large dose may result in greater adverse effects including white blood cell suppression and more fatigue. Also for some individuals, weekly infusions may be considered less convenient as they require a greater number of doctor visits. But, some studies suggest that the every three-week protocol may have greater anticancer effects. We typically begin younger men on the every three-week protocol. If tiredness is excessive, the protocol can be changed to the lower dose weekly protocol. Men who are weaker or more elderly usually begin with the weekly protocol at the outset.

# Reducing the Side Effects of Taxotere

The side-effects of Taxotere vary depending on the treatment schedule. Hair loss, which reverses after treatment is stopped, tends to be more severe using the three-week schedule. Nausea is not very common with either schedule because anti-nausea medicines are quite effective. With either protocol, Taxotere can affect the taste buds making food taste funny. So "icing the tongue" by keeping ice chips in the mouth during the infusion is advisable during each treatment.

Weakening of the fingernails is much more common with once-a-week Taxotere. "Icing" the finger tips during the infusion counteracts this problem. Narrowing of the tear ducts is another potential side-effect that could occur with weekly Taxotere. This effect is usually detected when increased tearing occurs because the ducts are not draining properly. Using artificial tears during and after each treatment to flush the Taxotere from the surface of the eye helps prevent this problem. However, if improper draining persists, a stent in the tear ducts may be necessary to prevent long-term scarring.

Another common side effect of Taxotere is neuropathy. Neuropathy is numbness or tingling in the fingers and toes. Generally neuropathy is mild. It slowly reverses over time after the Taxotere is stopped. Prescription Neurontin, Alpha Lipoic Acid, or high doses of L-Glutamine, an amino acid, can minimize the severity of the neuropathy. Other rare side-effects that can occur fairly uncommonly are rash, liver inflammation or diarrhea.  $\rightarrow$ 

### Older Men Tolerate Taxotere

Overall Taxotere is well-tolerated. We published a pilot trial in 2001 evaluating the tolerability of Taxotere in elderly men. The average age of the group was 78. The oldest man was 87. Using the weekly protocol, we found that Taxotere could be tolerated by most anyone. In that study 17 out of 20 men completed a full course of therapy. The three men who decided to stop the treatment before finishing the full course did so because they felt excessively tired. A copy of this published report is posted at www.prostateoncology.com.

# **Conclusion and Summary**

Taxotere prolongs survival in men with high-risk or advanced disease. Its beneficial effects may be even further enhanced by using it at an earlier stage in men with newly-diagnosed high-risk disease or in men with hormone sensitive, metastatic disease. Taxotere response rates can also be improved by combining it with other agents such as Carboplatin, Xeloda or Avastin. Ultimately, the maximum benefit from Taxotere is achieved by using it at the right time, by selecting an optimal schedule and by combining it with other effective agents. A well-informed patient working with a physician who is an expert in the treatment of prostate cancer will achieve the best results. □

For references and further reading, go to www.PCRI.org

### ARE YOU A FEDERAL EMPLOYEE?

Combined Federal Campaign (CFC) season is coming up! Help us continue to provide valuable resources to men with prostate cancer by donating to the Prostate Cancer Research Institute via the Combined Federal Campaign!

PCRI believes that a patient who understands his disease and treatment options will be empowered to communicate more effectively with his physician(s), and will obtain a better outcome. PCRI uses all available communication tools and programs, including a Helpline, a quarterly and a weekly newsletter, website and professional conferences to educate men about prostate cancer.

PCRI undergoes an annual financial audit, and consistently receives a "Best in America" seal of approval from the Independent Charities of America.

The Independent Charities Seal of Excellence is awarded after rigorous independent review. Only charities meeting the highest standards of public accountability, program effectiveness, and cost effectiveness are eligible. These standards include those required by the U.S. government for inclusion in the Combined Federal Campaign, possibly

the most exclusive fund drive in the world. Of the 1 million charities operating in the United States today, it is estimated that fewer than 50,000 – or 5 percent – meet or exceed these standards, and, of those, fewer than 2,000 have been awarded the Seal. We appreciate your support!

Use the following information to make a contribution to PCRI as part of CFC:

Tax-ID: 95-4617875

CFC: 10941

California State Employees Charitable Campaign (CSECC) Agency Code: 926

A story from a couple that called our Helpline. It details how support and information helped empower them to become confidently involved in their treatment decisions

# Letter to the PCRI Helpline:

For privacy, the callers requested that we use the husband's first name only.



Ferd Becker, PCRI Educational Facilitator

It began in March 2014, my husband Tom went to see a urologist for BPH. When a small nodule was found during the DRE exam, he was told he needed a biopsy even though is PSA was only 2.1. We decided to get a second opinion and once again was told a biopsy was required. Because Tom's father died of prostate cancer last year, I started reading everything I could to educate myself. One of the books I read was *Invasion of the Prostate Snatchers,* by Dr. Mark Scholz I found PCRI from that book. Tom insisted that I not tell any family or friends he needed a biopsy and to respect his wishes to keep this private.

Not having anyone to discuss this with made me feel very isolated and alone, so I called PCRI to seek advice and help from people who are going through the same kind of issues we were facing. The very first person I spoke with was a gentleman named David Derris who was very kind and understanding of our situation. What a relief it was to talk to someone who knew what we were going through. He later passed our number on to Ferd Becker who became a great friend to us. →

The helpline can be reached at: 800.641.7274

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