



# Prostate Insights

Prostate Cancer Research Institute

| The Latest Developments in Prostate Cancer Care

May 2015, Is. 18 Vol. 2

**Seed Implant Radiation Therapy**  
***Pg. 5***

**Mid Year Update Recap**  
***Pg. 9***

**2014 ASTRO Abstract Review**  
***Pg. 13***

**Side Effects of  
Surgery and Radiation**  
***Pg. 15***

**2015 September Conference**  
***Pg. 18***





# EDITORIAL

**Peter Scholz,**  
**PCRI Communications Manager**

Hello Researcher, welcome to the May edition of *Prostate Insights*! Yes, it is a slight revision to the previous name, but nonetheless, we feel it is more descriptive of what this newsletter is all about. I hope you enjoy the articles in this edition and find them useful and informative.

Although there is something in this issue for men with all types of prostate cancer, the featured articles in this edition contain important information about seed implant radiation therapy and its effects. John Blasko, MD, is a world leader in the development and use of brachytherapy for prostate cancer. In his article about seed implants, he talks about a new study that examines the current state of brachytherapy and compares it with other forms of radiation therapy. Mark Scholz, MD, PCRI's Executive Director, presents new information from the most recent ASTRO (American Society for Radiation Oncology) meeting. Stanley Brosman, MD, discusses the side effects of both surgery and radiation, and how to manage them.

Thanks to your support, our recent 2015 Mid Year Update was a success! Over 200 patients and caregivers attended the half-day conference, and many of the attendees were able to interact directly with leading doctors in the prostate cancer field. In case you missed it, I will give a brief overview of the topics that were presented, and explain how to get a copy of the DVD so you can view it at home.

In our mid year appeal, we give you an overview of PCRI's programs to help you get acquainted with all the ways that we can serve and help you find the information you need. We also have a brief empowering story from our helpline. And finally, registration for the September conference is now open, and we have information about how to sign up at the end of this newsletter. I hope this issue helps you find answers and develop questions for your doctor that will lead you to a better understanding of your prostate cancer journey!

Prostate Cancer Research Institute  
5777 W. Century Blvd., Suite 800  
Los Angeles, CA 90045  
Phone: 310.743.2116 | Fax: 310.743.2113  
Helpline: 800.641.PCRI (7274)  
E-mail: [info@pcri.org](mailto:info@pcri.org)  
Website: [www.PCRI.org](http://www.PCRI.org)

---

## Editorial Staff

Editor: **Peter Scholz**

*Medical Review Board:*

**Duke K. Bahn, MD**  
**Stanley A. Brosman, MD**  
**Arthur N. Lurvey, MD**  
**Mark C. Scholz, MD**  
**Michael Steinberg, MD**

## Board of Directors

**Chester A Swenson, President, Chairman**

Business Consultant/Entrepreneur

**Michael Steinberg, MD, Vice President**

Professor and Chair, Department of Radiation Oncology, and  
David Geffen School of Medicine,

**Harry Hathaway, Esq. Of Counsel**

Norton Rose Fulbright US LLP

**Mark C. Scholz, MD, Executive Director/Treasurer & Co-Founder**

Director, Prostate Oncology Specialists

**Duke K. Bahn, MD**

Director, Prostate Institute of America

**Stanley A. Brosman, MD**

Pacific Urology Institute, Pacific Clinical Research

**Scott Cohen**

Chief Executive Officer, 180Fusion

**Arthur N. Lurvey, MD, FACP, FACE**

Contractor Medical Director, JE

**Jerry Peters**

MCG Records

**Claudia B. Sangster, Esq.**

Director of Philanthropy, Planning CTC, myCFO, Inc.

**Jerome Seliger, PhD**

Professor of Health Administration, California  
State University, Northridge

---

# Table of Contents

## 5 **Seed Implant Radiation Therapy**

John Blasko, MD, Seattle Prostate Institute

*Dr. Blasko, a recognized leader in the field of prostate brachytherapy, examines the current state of brachytherapy, and compares it with other treatments.*

## 8 **Mid Year Appeal**

The PCRI Staff

*A letter from the PCRI Staff, and a brief description of each of our educational programs that can help you with your research.*

## 9 **PCRI Program Update: 2015 Mid Year Update Recap**

Peter Scholz, PCRI Communications Manager

*Peter recaps the 2015 Mid Year Update summarizing the topics that were covered.*

## 13 **2014 ASTRO Abstract Review**

Mark Scholz, MD, PCRI Executive Director

*Dr. Scholz covers exciting new studies that were presented at the most recent annual ASTRO meeting, and why they are significant to patients.*

## 15 **Side Effects of Surgery and Radiation**

Stanley Brosman, MD, Pacific Urology Institute

*Dr. Brosman discusses the side effects of surgery and radiation, such as incontinence and sexual dysfunction, and describes how they can be managed.*

## 16 **Helpline Corner**

Jan Manarite, Senior Educational Facilitator, PCRI Helpline

*Jan shares a story about how a helpline caller was enabled to make the best treatment call for his case using his medical records.*

## 18 **Registration for the September 2015 Conference is Now Open**



# Seed Implant Radiation Therapy

*LDR (low dose rate) brachytherapy for prostate cancer is more commonly known as seed implants. You may be familiar with this treatment option but for those of you who may be new to the confusing world of prostate cancer treatment, seed implants involve the insertion of small radioactive pellets or seeds into the prostate by transrectal ultrasound guidance, in order to deliver a focused dose of radiation to the prostate.*

**John C. Blasko, MD,  
Seattle Prostate Institute WA**

The seeds contain one of three possible radioactive isotopes: Palladium-103, Iodine-125 or Cesium-137. These isotopes have slightly different characteristics, but all are proven effective in eradicating cancer. What they have in common is that they emit low energy radiation for a period of a few months and then become inert. As a result of the low but continuous energy, an intense total dose of radiation is delivered to the prostate, but very little radiation reaches the sensitive surrounding organs such as the bladder and rectum. In the world of radiation treatment, a well-done seed implant offers the best of both worlds: a high dose to the prostate, a low dose to normal tissues.

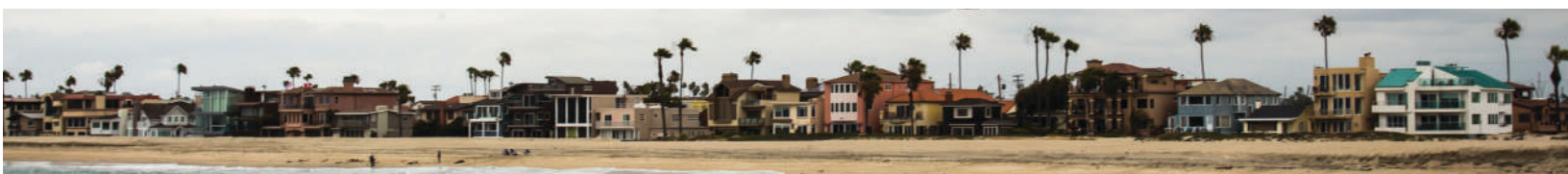
Prostate seed implants have proven to be safe and effective for over 25 years. What

is new about seed implants in 2015? I am excited by a recent study done by Canadian researchers. A major criticism of prostate cancer research is the lack of high quality, prospective, randomized trials that accurately compare the results of various treatments. Well, the Canadians have managed to pull it off. They have just completed analysis of the ASCENDE-RT trial. The results have been presented at several major medical meetings, but have not yet been published and is currently available only in preliminary abstract form.

The ASCENDE-RT trial is a multicenter, randomized trial of dose-escalated external beam radiation therapy versus low-dose-rate brachytherapy for men with unfavorable-risk prostate cancer. 276 men with high-risk disease and 122 with intermediate-risk disease were entered

into the study. All 398 men received 12 months of androgen deprivation therapy (ADT) plus 46 Gy of whole pelvis external beam radiation (EBRT). Then, 200 of the men were randomly assigned to a conformal external beam boost of 32 Gy while 198 were randomly assigned a brachytherapy boost of 115 Gy with Iodine-125.

To put this study in perspective, seed implants historically have been used in one of two ways: 1) as a standalone treatment for low-risk prostate cancer or, 2) as part of combination approach in conjunction with modest doses of external beam radiation for intermediate and high-risk prostate cancer. Many retrospective studies have demonstrated that the combination of modest dose external beam and a seed implant boost with or without hormones is a





## Seed Implant Radiation Therapy Continued

very effective treatment. Alternatively, sometimes high-risk disease is treated with hormones plus high-dose external beam radiation (IMRT) without seeds. For years, many radiation experts have contended that while seed boost treatment is effective, the combination of hormones with IMRT is just as effective and is simpler to administer. The ASCENDE-RT is the very first randomized trial ever to evaluate the question of whether adding seed implants improves results to a material degree.

### **CHARACTERISTICS AND RESULTS OF THE ASCENDE-RT TRIAL**

There was a total of 398 men in the trial. The median observation time after radiation for all the men in the trial was 6.5 years, enabling statistical projections to be made for as long as 9 years. Using PSA control rates as the indicator of success, at 5 years 77% of the hormone + IMRT alone were relapse-free compared to 89% of the Hormone + IMRT + seed boost patients. At 9 years, the results were even more dramatic with a relapse free rate of 63% vs. 83% in favor of the seed boost

patients. Thus, 9 years after treatment, the PSA based cure rate of the seed boost patients was improved by 20%!

The other encouraging aspect of this data is the shape of the PSA survival curves. For the seed boost patients, after about 5 years, the curve becomes very flat meaning that very few patients are relapse after 5 years. In contrast, the curve for the IMRT without seed group continues to fall sharply even out at 10 years (patients are continuing to fail). This suggests the likelihood that most of the seed boost patients will continue to remain in remission while the IMRT alone patients may continue to fail.

In summary, this randomized study demonstrates a dramatic 20% improvement in PSA success in patients who received a seed implant boost compared to those who received IMRT alone. The rationale for this improvement is that brachytherapy delivers a higher and more effective dose of radiation to the prostate which is unachievable with external radiation alone.

As you may be aware, there is controversy regarding the importance of PSA-based outcomes. Some physicians feel that a more important endpoint to measure is how many patients are alive and how many died of prostate cancer. How did the ASCENDE-RT trial do with these endpoints? Well, no difference was seen between the seed boost and the EBRT alone groups with regards to overall survival or prostate cancer-specific survival. This finding is no surprise to me and does NOT mean to me that there is no difference in the treatments. This is because not enough follow-up time has elapsed for PSA failures to manifest mortalities. In this era of multiple effective systemic treatment agents, it is not difficult to keep most people from dying of this disease for up to a decade after they have failed primary treatment. It will probably take at least another 6 or 7 years of follow-up for the PSA failures to translate into survival statistics in this study. To get on my soapbox for a minute, PSA is an incredibly important early clinical indication of success or failure. In addition to shortened survival, PSA failure



***In 1985, Dr. Blasko and Haakon Ragde, MD, performed the first transperineal, template and ultrasound guided prostate implant in the U.S. Since that time, Dr. Blasko devoted his career to the development, refinement and promotion of this technique. Today, he is internationally recognized as an authority in prostate brachytherapy and is considered one of the founding fathers of this modality. He continues his involvement with brachytherapy by consulting with medical device companies and physicians seeking to improve their brachytherapy skills.***

has a very negative impact on quality-of-life. Further diagnostic tests are required, often followed by a lifetime of further treatment with hormones, chemotherapy or radiation. A patient with a PSA failure has a much worse quality-of-life than one who does not.

What else is new in prostate brachytherapy? Brachytherapists continue to analyze and publish excellent 10+ year results for the full spectrum of low to high-risk disease. Numerous comparative quality-of-life studies have appeared demonstrating the favorable side effect profile of brachytherapy compared to surgery or IMRT. But mostly, I am impressed with the continuing evolution of technology and how it has improved the accuracy and reliability of brachytherapy. Transrectal ultrasound imaging has made tremendous strides and I am astounded by the clarity of images I now see compared to the shadows of 10 years ago. We now have the capability of merging and coordinating MR imaging with transrectal ultrasound before, during, and after the operating room for even finer control and knowledge of seed placement. With this faster and more sophisticated computer software, our ability to precisely place seeds and to control the radiation doses to the urethra, bladder, and rectum is greatly improved. I expect these technological improvements to further reduce the chance of complications and further enhance cure rates.

In this era of cost-consciousness, there is an ongoing effort to assess the value of medical interventions by means of comparative effectiveness analysis. This approach uses sophisticated mathematical modeling derived from published outcomes and morbidity data as well as costs to determine the value of one treatment versus another. For low-risk prostate cancer treatment, there have been several comparative effectiveness studies done by the Institute for Clinical and Economic Review (ICER) at Harvard University. Considering outcomes and cost of treatment, the summary of these studies published in 2013 is that brachytherapy for low-risk disease is the most effective and *least expensive* initial treatment compared to IMRT, proton, or surgery.

Given all this very positive news about prostate brachytherapy what is its current status in the United States? Shockingly, there has been a dramatic *decrease* in the use of brachytherapy between 2002 and 2010 (the last year in which data is available). In 2002 brachytherapy was used in 17% of cases but by 2010 it decreased to only 8%. Over the same time interval, surgery increased from 44% to 59%. This shift appears to coincide with the introduction of new technologies such as robotic surgery, IMRT, and proton therapy. The rapid adoption of these very expensive new technologies has occurred despite the absence of randomized prospective data such as the ACENDE-RT data that was presented above. In my



opinion, prostate treatment has migrated away from seed implants, not because of science, but because of economics and politics. All of these new approaches generate much more revenue for both hospitals and physicians. Hospital marketing departments take advantage of seductive terms like “robot-assisted” and “proton” to publically promote their institutions and capture market share. In the final analysis, surgeons like to do surgery and IMRT specialists like to do beam radiation because they get paid more. How interesting is it to note that the popularity of brachytherapy is growing rapidly in many other countries where medical reimbursement is fixed.

Multiple studies over the past 25 years have demonstrated that brachytherapy either alone or in combination with external beam radiation is as effective and—particularly in intermediate and high-risk disease—superior to prostatectomy or IMRT alone for cure potential and quality-of-life. The ACENDE-RT prospective, randomized trial proves the superior cure rates attainable with seed implantation. When these excellent clinical outcomes are coupled with proven cost-effectiveness, what is there not to like about seed implants? ■

# Prostate Cancer Research Institute

Dear Supporter,

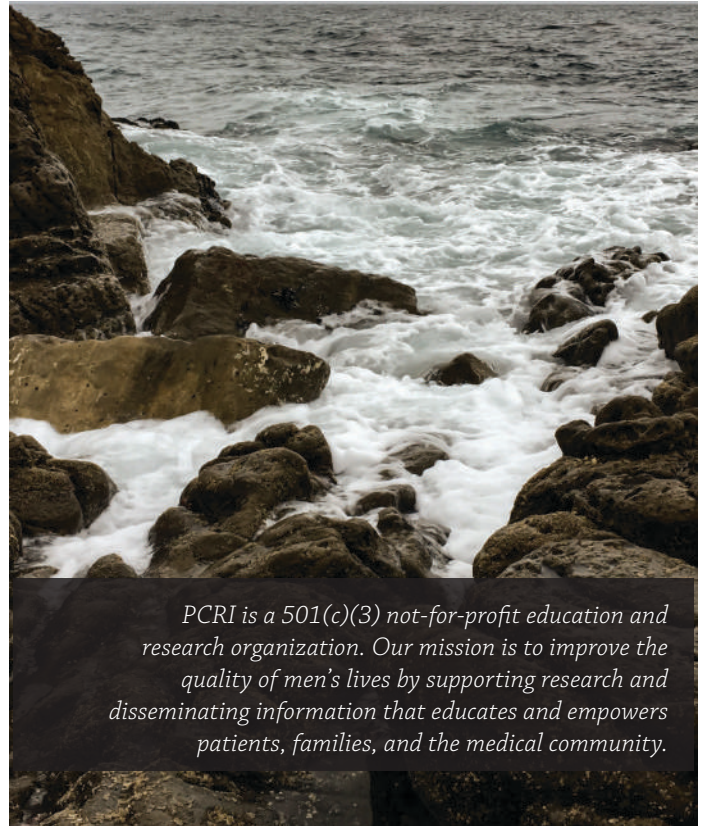
We are grateful for your generous contributions which help men and their caregivers research every aspect of prostate cancer. Since there are so many treatments and management choices, it is critically important for patients and caregivers to be able to determine which is their best option.

We believe that the best way to an optimal plan is through shared-decision making, which is effective collaboration between patients and their doctors. A patient-centered approach leads to the best outcome. Our educational conferences, Helpline, website, and our free *Prostate Insights* newsletter connect patients with valuable information from leading experts.

Please take a moment to review the PCRI programs below to learn how we have been supporting the prostate cancer community. A generous donation to the PCRI will bring help and guidance to men and families who are facing so many challenges from prostate cancer.

Warm regards,

The PCRI Team



*PCRI is a 501(c)(3) not-for-profit education and research organization. Our mission is to improve the quality of men's lives by supporting research and disseminating information that educates and empowers patients, families, and the medical community.*

## Our Programs

### CONFERENCE

Every year, hundreds of patients, caregivers, support group leaders, and physicians gather together for a weekend of interactive sessions at our annual conference. Patients can pose questions to the most knowledgeable physicians and academic researchers from leading medical institutions. Information is presented in a way that the attendees can comprehend and apply to their own case. DVD's from our conferences are circulated to support groups around the world.

### HELPLINE

Our free Helpline is staffed by trained facilitators who guide patients towards the best treatment by answering questions, interpreting medical records, explaining treatment options, and discussing potential side effects.

The PCRI Helpline empowers patients to partner with their doctor to make optimal treatment choices based on their own risk-benefit perspective and personal lifestyle preferences.

### WEBSITE

The website assists men with newly-diagnosed, relapsed, and advanced disease in their journey, helping them to understand their prognosis and treatment options.

PCRI.org contains a wealth of resources, including medical articles, risk evaluation tools, information about clinical trials, support groups, patient assistance programs, educational videos and more.

### NEWSLETTER

*Prostate Insights* is a free quarterly newsletter that publishes information about new developments in the prostate cancer world. Scientific articles are authored by renowned medical professionals and researchers. Our articles are written to be accessible to patients and to provide reviews on state-of-the-art treatment, findings from the latest clinical research, information about lifestyle issues and methods for avoiding side effects.

To subscribe to our newsletter visit [www.PCRI.org/insights](http://www.PCRI.org/insights), call us at 800.641.7274 or email us at [info@pcri.org](mailto:info@pcri.org).





# 2015 MID YEAR UPDATE



*Peter Scholz, PCRI  
Communications Manager*

*The Prostate Cancer Research Institute would like to thank everyone who attended the 2015 mid year update and made it a success. This conference held at the Los Angeles Airport Marriott brought patients, caregivers, and leading doctors together for a half day of fun and learning.*

The presentations at the 2015 Mid Year Update focused on new developments in prostate cancer imaging. Dan Margolis, MD, from UCLA and Fabio Almeida, MD, from Phoenix Molecular Imaging—both renowned experts in their respective fields—gave succinct presentations on the use of both MRI and nuclear imaging for all stages of prostate cancer. At the end of their lectures, they answered questions from Dr. Mark Moyad—the moderator of the proceedings—and from the audience. The event culminated with an extended Q&A session with Mark Moyad, MD, and Mark Scholz, MD, taking questions from the audience on topics relating to men's health, diet, supplements, and prostate cancer. They

also presented new information on the findings of the latest clinical studies and their implications.

Dr. Margolis' presentation on the use of MRI for prostate imaging discussed whether or not MRI will be a suitable replacement to the current standard of using random needle biopsy. He dis-

cussed the purpose of random needle biopsy, its accuracy, and the way it influences treatment choices. By comparing the current state of prostate cancer screening to screening practices for other forms of cancer, he showed how MRI is revolutionary for prostate cancer. He showed how MRI scans can get both anatomic and functional details within





## 2015 Mid Year Update Recap

the prostate gland, demonstrating how it answers questions like “where is the cancer located, and how aggressive is it?” He explained how this data gives a clearer picture of the disease. He concluded his lecture examining multiple studies that compared prostate MRI with random biopsy illustrating the accuracy of MRI. Following his lecture Dr. Margolis answered questions like:

- **What should I look for in a radiologist and how do I find a center of excellence?**
- **How well are glucagon and contrast agents tolerated by patients?**
- **What should someone do in preparation for an MRI Study?**
- **What does it cost and how is insurance coverage?**
- **Can Gleason 3 + 3 = 6 be detected on MRI?**
- **What are the differences in image quality between the results of the 1.5T machine and a 3T machine and how does this affect the results?**

Subsequently, Dr. Almeida’s presentation covered nuclear imaging and how it is used to detect and locate cancer recurrence both inside and outside the prostate bed. He gave examples of what nuclear imaging scans can show and how it affects treatment decisions. He explained the mechanism of how imaging agents can detect prostate cancer. He gave practical information on the process of undergoing a PET/CT scan. This portion of his lecture covered how one prepares for a nuclear imaging scan, the amount of time the scan takes, and more.

He explained how PET/CT is clinically useful for men with recurrent disease, and men with advanced disease. He also described how it can be used to help treatment selection for second-line therapies. Finally, he discussed new imaging agents on the horizon that show promise for improvement in the nuclear imaging field.

Dr. Almeida answered questions like:

- **How much radiation are you exposed to on a CT scan?**
- **What does it cost in cash and how well is it covered by insurance?**
- **How much better is F18 PET than technetium?**
- **Are there any factors that can cause false positives?**
- **How does prior treatment affect scan results and which treatments severely affect the way scans are read?**

After Almeida’s lecture Dr. Scholz gave a brief presentation on the effects of testosterone on prostate cancer, focusing on the side effects of hormone therapy. He discussed how a loss of libido could be destructive to relationships. He talked about the importance of balancing the sex drives of partners and how testosterone can be useful. He then addressed the misconception that men undergoing treatment for prostate cancer shouldn’t





take testosterone thinking that it invariably fuels cancer growth. He discussed cases where it is safe and appropriate to take testosterone and situations where it should not be taken. Dr. Scholz answered questions like:

- **What form of testosterone replacement is preferable and how do shots compare to creams?**
- **What factors affect testosterone production, and are there any supplements that increase testosterone?**

Drs. Scholz and Moyad then covered exciting new studies and treatments and took questions from the audience on all topics of men's health. For example:

- **How do the chemotherapy drugs Taxotere and Jevtana compare? Which is better?**
- **How does Xofigo work?**
- **What are the side effects of bisphosphonates and when is it appropriate to take them?**
- **What does Vitamin D do? How much should I take?**

The Q&A Session at the end of the event went overtime and the attendees received detailed answers to their questions. Dr. Moyad's energy and humor imbued the event with a lighthearted atmosphere which set the tone for the afternoon. The event was packed full of the latest information and many questions were answered embodying what

PCRI is all about—connecting patients with information from leading doctors and giving them a clearer picture of what is becoming available on the cutting edge of prostate cancer care.

DVDs containing footage of all of the lectures and Q&A Sessions are available to order on the PCRI website ([www.PCRI.org](http://www.PCRI.org)) with a minimum donation of \$50. Don't miss this opportunity to stay updated on the latest about prostate cancer and men's health. Also, remember that registration for our 3-day conference in September is now open at a discounted rate until June 26th. Sign up today! We look forward to seeing you in September. ■



DVD's of the lectures & Q&A sessions available at [www.pcri.org](http://www.pcri.org)

## Program Update

# Interested in learning more about **Active Surveillance for Prostate Cancer?**

PCRI is proud to introduce an educational video series on active surveillance featured on our website.

- Interviews with patients on active surveillance
- Interviews with leading doctors
- Interviews with caregivers of men on active surveillance

Visit [www.PCRI.org](http://www.PCRI.org) and click on “Active Surveillance”



**US TOO INTERNATIONAL**  
PROSTATE CANCER EDUCATION AND SUPPORT NETWORK



*We're very proud and excited to be hosting the*  
**Us TOO 25th Anniversary  
Educational Symposium & Gala Celebration Dinner**

***Take Action—Get Connected!***

**Friday, June 19, & Saturday, June 20, 2015**  
Hyatt Regency O'Hare, 9300 Bryn Mawr Avenue, Rosemont, IL 60018

*Please Join Us! Visit [www.UsToo.org](http://www.UsToo.org) for more information and event registration.*



# 2014 ASTRO Abstract Review

Mark Scholz, MD, PCRI Executive Director



*A number of interesting Abstracts were presented at the annual radiation oncology meeting in September 2014 in San Francisco. This article briefly summarizes those of greatest interest.*

## ***Metastatic prostate cancer to pelvic nodes can be cured with radiation.***

In Abstract 2573 Dr. Shukla from the Cleveland Clinic reported that 14 of 18 patients with pathologically confirmed pelvic lymph node metastases and a rising PSA after surgery remain in continuous PSA remission two years after salvage radiation aimed at the pelvic nodes. In Abstract 2527 Dr. Mourad from Albert Einstein College in NY also reported that radiation to the fossa and lymph nodes after surgery in men with a rising PSA resulted in a 79% cure rate (combined with 6 months of hormone therapy).

**Comment:** These reports indicate that state-of-the-art radiation can achieve a cure in 4 out of 5 men when they are treated at the first sign of relapse with a very low PSA.

## ***Cure rates with radioactive seeds and surgery are identical in men under 60.***

In Abstract 1127 Dr. Ashamalla from Cornell reported that in a retrospective

study of 133,000 men the 10-year mortality rate was 2.6% after seed implant and 2.1% after surgery (the difference being within the range of statistical variation). Mortality rates after beam radiation without seed implant were substantially higher at 13%.

**Comment:** Cancer survival with seed implants is better than beam radiation and equivalent to surgery.

## ***Seed Implant Radiation***

There were many Abstracts reporting the effectiveness of IMRT, Proton therapy and Cyberknife, the most financially lucrative types of radiation. (No surprise at a meeting all about radiation) Very few abstracts, however, compared one form of radiation head to head with another, with one notable exception—seed implants. A number of abstracts compared seed implants to various forms of beam radiation (IMRT, Proton, and SBRT). Almost universally, these studies show that seed implants result in superior cure rates.

## ***An inflammatory reaction in the prostate after radiation reduces mortality.***

In Abstract 345 Dr. Zelefsky from Sloan-Kettering observed a PSA rise, a “bounce,” in 20% of men undergoing radiation. Cancer relapse rates in men who showed a bounce were 50% lower.

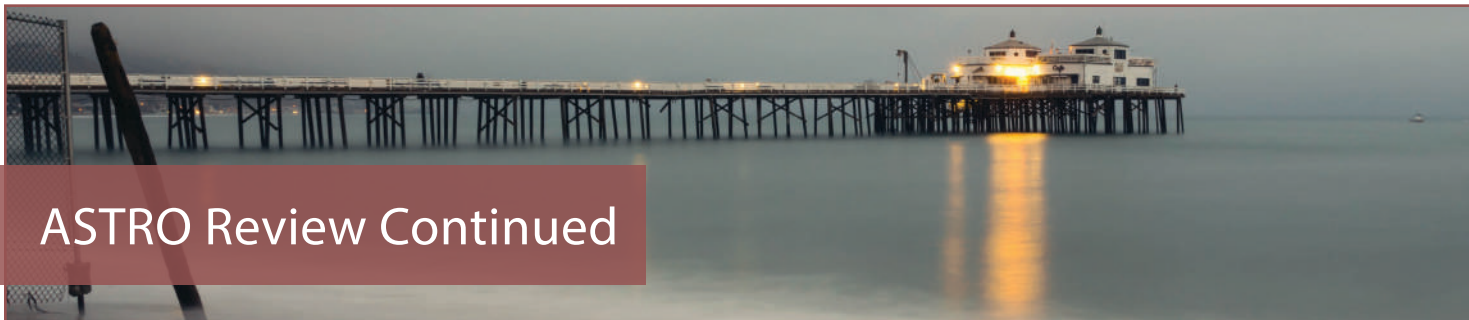
Their rate of developing metastases was 80% lower.

**Comment:** Dr. Zelefsky speculates that the bounce phenomenon is an immune-mediated inflammatory reaction and that the immune hyperactivity in the prostate gland is a sign that the immune system is “switched on” to effectively target cancer cells outside the prostate. In a sense, the “bounce” is a sign of the immune system engaging and attacking the cancer.

## ***Cancer relapse rates reduced by 25% in men treated with radiation combined with a cholesterol pill.***

In Abstract 2491 Dr. Park from Harvard summarized 17 observational studies. Seven studies used radiation, 9 used surgery and 1 used both in a total of 30,000 patients. Cholesterol pills reduced cancer relapse rates after radiation but not after surgery. These findings validated another study in 21,000 patients that previously reported similar findings.

**Comment:** The evidence for favorable anti-cancer effects from cholesterol pills, otherwise known as statins, continues to mount.



## ASTRO Review Continued

### ***Increased prostate cancer mortality in diabetics taking insulin.***

In Abstract 2608 Dr. Ziehr from Harvard reported a two and a half times higher rate of prostate cancer mortality in diabetics taking insulin compared to diabetics with prostate cancer on medications besides insulin.

**Comment:** This report is interesting because Metformin, a pill that lowers insulin, has been reported to reduce prostate cancer mortality. Dr. Ziehr's report provides even further evidence that high insulin levels stimulate prostate cancer growth and progression.

### ***The risk of bladder and rectal cancer from seed implants.***

In Abstract 2536 Dr. Hamilton from British Columbia reported a 1% increase in the incidence of bladder or rectal cancer 10 years after treatment in men receiving a radioactive seed implant compared to men who had prostate surgery. The 10-year mortality rate, however, was similar: 0.7% in seed patients and 0.6% in surgery patients.

**Comment:** Secondary cancers from radiation are a risk that is well-known. This study estimates that the chance of a secondary rectal or bladder tumor from a seed implant is about one in a hundred.

### ***Doctor assigned grading of rectal bleeding after radiation is untrustworthy.***

In Abstract 2479 Dr. Huynh-Le from Johns Hopkins surveyed 250 radiation oncologists asking them to grade rectal toxicity in 4 hypothetical patients with rectal bleeding after radiation. The study author observed "wide heterogeneities of radiation oncologists grading rectal bleeding."

**Comment:** Rectal bleeding and inflammation is one of the most dreaded complications of radiation. This study indicates that published reports about the frequency and seriousness of proctitis may not be very trustworthy.

### ***PSA screening reduces metastases by 50%.***

In Abstract 341 Dr. Shen identified 424,000 men diagnosed with prostate cancer between 1989 and 2010 (PSA screening started after 1989). In 1988 13% of men had metastatic disease at the time of diagnosis. In 2010 only 6% of newly-diagnosed men had metastases.

**Comment:** PSA screening catches prostate cancer at a much earlier stage. The goal is now to figure out how to reduce the unnecessary harm that follows improper screening: radical treatment in the 100,000 men every year who are

diagnosed with harmless Gleason grade 6 type of prostate cancer.

### ***Increasing use of surgery in an era of active surveillance.***

In Abstract 2553 Dr. Gray from Massachusetts General Hospital reported on treatment trends in 800,000 newly-diagnosed men treated between 2004 and 2011 based on risk category: low (SKY), intermediate (TEAL) and high-risk (AZURE). For men in SKY, surgery increased from 40 to 54%. For TEAL, surgery went from 48 to 58%. For AZURE, surgery increased from 30 to 41%.

**Comment:** Even in this era of greater enlightenment about the advantages of active surveillance, surgery continues to increase.

### ***My Thoughts:***

Looking forward, further improvements in treatment are likely to come from targeting the cancer within the prostate (instead of treating the whole prostate). Now that quality prostate imaging is becoming available with multi-parametric MRI, targeted radiation is beginning to look like a feasible goal. ■



# Side Effects of Surgery and Radiation

Stanley Brosman, MD,  
Pacific Urology Institute



*Men with prostate cancer have many choices to face before deciding on treatment. Although treatment may be effective, there are risks. Many “complications” are really events that can be anticipated. They may be temporary or permanent. Regardless of the type of treatment, whether it is a medication, surgery or radiation, there may be side effects or complications that have the potential to change your life.*

Complications associated with surgery are usually evident within the first few weeks or months. Complications that show up years later are rare. Complications associated with radiation therapy can occur early and sometimes many years later. Far and away, the very best way to minimize complications is to be treated by physicians of the highest caliber, those who are experienced in managing prostate cancer.

Just to be clear, a recurrence of the cancer is not considered to be a complication. Surgery and radiation are very effective in eliminating the cancer inside the prostate but if any cancer cells have already escaped, they will not be cured.

## COMPLICATIONS ASSOCIATED WITH SURGERY

Concerns about surgery relate to just having a major surgical procedure and general anesthesia. Before surgery an extensive evaluation performed by the internist and cardiologist, ensures that there are no other preexisting problems.

Even after the surgery has been completed there are risks to be considered. Postoperatively, an infection may develop or there may be excessive bleeding necessitating a blood transfusion or even another trip back to the operating room to stop the bleeding. There is also a risk of developing blood clots in the legs. This risk is minimized by getting men out of bed the same day or next day following surgery. In addition, during surgery a compression device is placed on the calf muscles that automatically inflates and deflates to maintain good blood flow in the legs.

Surgery often causes problems with bladder control and erections. These may be temporary or permanent. After the operation, a catheter is left in the urethra for about a week until there is adequate healing between the urethra and its new attachment to the bladder. A minority of men have perfect bladder control right after the catheter is removed but you certainly can't count on it. With the prostate out of the way, however, the urine flows just like when you were twenty years old.

## INCONTINENCE

The surgical removal of the prostate involves not only the total removal of the

prostate but also the section of the urethra that goes through the prostate. The lymph glands in the pelvis are often removed as well. The most common problem after surgery is that the ability to maintain complete urinary control is compromised. The segment of urethra that is removed contains muscles that participate in the prevention of urine leakage.

The duration of the incontinence can vary from days to months. Most men regain their continence within six to twelve months. The majority of men, regardless of the presence or absence of incontinence, will wear a pad, just in case. Men who are active in sports are advised to wear a pad because a sudden exertion or strain can trigger a squirt of urine.

The severity and recovery of continence correlates with age. Men under 65 years usually have a rapid improvement and more than 90% are completely dry within six months. Men older than 65 will need more time and those over 70 should expect to have some incontinence for a year or more. A 75-year-old, obese man had better stock up on pads and diapers because his risk of permanent incontinence is high. Men should



## Side Effects Continued

initiate pelvic floor muscle exercises prior to surgery and continue after surgery. These are the same exercises that women use to control incontinence.

Men who are using more than three pads a day for more than a year are in the minority but there are remedies. However, they involve some type of surgical procedure. Men with mild to moderate incontinence, as defined by having to wear 2-3 pads a day can be improved with a “sling” procedure. An incision is made beneath the scrotum and a mesh sling is placed under the urethra. The sling lifts up the urethra and is attached to the bones to keep it in place. This compresses the urethra and the added resistance decreases the

amount of leakage so that only one pad a day is necessary.

Men with more severe incontinence (3+ pads a day) can be treated by having an artificial urethral sphincter placed around the urethra. This is a cuff-like device similar to a blood pressure cuff that can be inflated. The cuff is kept inflated most of the time and keeps the urethra compressed so that urine cannot leak out. When it’s time to urinate, the cuff is deflated by squeezing on a small “switch” that is placed within the scrotum. The cuff deflates for 90 seconds and then automatically inflates again. Although these procedures can improve the incontinence, they can hardly be considered cures.

### **URETHRAL STRICTURE**

Scar tissue can form at the site where the urethra is sewn to the bladder. This is known as a stricture and occurs in about 5% of the surgeries. The symptoms are a weak urine flow, a urine stream that splits and goes in different directions and straining to urinate. Stricture is treated by stretching the scar by passing a series of instruments of increasing size through the stricture. This is known as a urethral dilation. Another method to open the stricture is to use a laser to make several splits in it.

### **SEXUAL FUNCTION**

The ability to obtain normal, sustainable, satisfying erections is a concern for men who have been having an active sexual life. If the nerves and blood vessels that run on the outer edge, on both sides of the prostate can be saved, there is a good chance that there will be a continuance of good sexual function. But, if there are preexisting problems or if a man is over the age of 70, don’t count on it. Also, if the cancer is extending to the edge or beyond the prostate, there is little hope of having any functional erection after surgery.

### **COMPLICATIONS RELATED TO RADIATION THERAPY**

Urologic and rectal problems can occur but serious problems occur in less than 5% of men. It is rare for a man to develop urinary or fecal incontinence. Sexual function is usually maintained, at least





for a while. The older a man is when he is treated, the more likely he is to have problems getting good erections and having perfect bladder control.

In general, similar complications can develop regardless of which type of radiation is used. This includes Proton Beam, permanent seed implants (brachytherapy), high-dose, temporary

brachytherapy, IMRT, IGRT, SBRT and any other form of radiation to the prostate. The intent of the treatment is to deliver sufficient radiation to eliminate the cancer. However, the urethra, which goes through the center of the prostate, the bottom of the bladder, and the surface of the rectum that is next to the prostate also receive radiation. It is radiation to these areas that causes complications

like urinary frequency, urgency, burning with urination and difficult bladder emptying. These symptoms can start during the first few weeks or months following the completion of the therapy and can last for a year. They tend to gradually go away and medications that are prescribed to minimize these problems can be beneficial. ■

# Helpline Corner

*Jan Manarite, PCRI, Senior Educational Facilitator*

Mr. N.B. called the PCRI Helpline in March of this year, along with his wife. He is a military veteran and was recently diagnosed with prostate cancer. He was 62, had a PSA of 7 (before biopsy), and a Gleason of 3+3=6 on his biopsy pathology report. N.B. was looking for more information, as he felt rushed by his urologist to make a treatment decision very soon. Both he and his wife felt unsure about what to do. He did have copies of his medical records, so that was very helpful. His wife was worried about him dying soon, and claimed that this was the impression they got from their recent doctor's appointment. But they felt a strong need to slow down, and do further research.

As N.B. read his pathology report, it was clear that his Gleason score from the biopsy was 3+3=6 as there was no reference to any other Gleason Score. I asked them if they understood what this meant. They said they weren't sure. I proceeded to explain that the Gleason was just part of the overall risk category

evaluation for a newly diagnosed patient (PSA, Clinical Stage, and core percentages were also important), but that the purpose of the Gleason was to help evaluate the aggressiveness of the cancer cells. For biopsy Gleason – a Gleason of 6 was the lowest, and the least aggressive he could have. Many experts agree that Gleason 6 should not even be called a cancer since it never metastasizes.

His wife became emotional and instantly relieved. I directed them to websites that explained the Gleason 6 issue further, including PCRI's, but also Stanford, American Cancer Society, and Johns Hopkins. N.B. also was encouraged, and no longer worried about dying soon, which was weighing heavily on them both. He decided to take more time to research his options, is consulting with a radiation oncologist and may consider active surveillance.

It is important to remember that every prostate cancer is different. The best way to understand yours is to have

copies of your medical records. Because N.B. had a copy of his pathology report, we were able to speak about accurate details, which enabled me to empower him. Mental recall and verbal information are inadequate when you are trying to evaluate the specifics of your cancer. PCRI is here to help. ■



# 2015 PROSTATE CANCER CONFERENCE

SEPT. 11-13, 2015

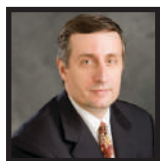


JOIN PATIENTS & CAREGIVERS,  
LEARN ABOUT THE **LATEST**  
**PROSTATE CANCER**  
**DEVELOPMENTS** FROM  
RENOWNED MEDICAL EXPERTS

## Overview

The Prostate Cancer Research Institute's annual conference is the leading conference for prostate cancer education and support. The conference provides a weekend of educational sessions on treatment options, both new and of landmark importance, and addresses lifestyle and quality of life issues. Information is presented by world-renowned physicians and researchers. The keynote sessions are moderated by Dr. Mark Moyad, a leader in the fight against prostate cancer, who makes it personal and relevant to the patients in the audience. In addition, there are opportunities throughout the 3-day event to participate in Q&A sessions with the faculty, hear in-depth presentations about particular treatment options, attend support groups with other patients, and meet with various organizations and companies who provide services and products for prostate cancer patients.

## Moderators



**Mark Moyad, MD**  
Jenkins/Pokempner Director of Complementary & Alternative Medicine  
University of Michigan Medical Center



**Mark Scholz, MD**  
Medical Director  
Prostate Oncology Specialists &  
Executive Director  
Prostate Cancer Research Institute

## Travel

The conference is held at the Los Angeles Airport Marriott. A special room rate of \$105/night is available until August 20th, 2015 by calling the Marriott directly at 310.641.5700 or by visiting [www.PCRI.org](http://www.PCRI.org) for the online booking link.

Discounted airplane booking with DELTA is available via [www.delta.com](http://www.delta.com). When booking online, select *Book A Trip*, click on *Advanced Search* and use the **meeting code NMKZ8**. Discount car rental through AVIS using discount code **#D374541**. There is a complimentary shuttle from LAX terminals to the Marriott. A reduced self-parking rate of \$12/ day is available for those who are driving to the conference.

abbvie

Johnson & Johnson

Dendreon  
Targeting Cancer, Transforming Lives®

Takeda  
MILLENNIUM  
THE TAKEDA ONCOLOGY COMPANY

CyberKnife  
ACCURAY®



astellas

MEDIVATION  
Driven by science. Focused on life.

SANOFI



AMGEN  
Oncology

## \*Speakers & Topics

**Tomasz Beer, MD**  
Oregon Health and Science University  
*Zytiga and Xtandi*

**Matthew Cooperberg, MD**  
University of California San Francisco  
*Active Surveillance*

**Charles Drake, MD**  
Johns Hopkins School of Medicine  
*Immune Therapy*

**Peter Grimm, DO**  
Prostate Cancer Center of Seattle  
*Seed Implant Radiation*

**John Mulhall, MD**  
Memorial Sloan-Kettering  
*Sexual Side Effects*

**William Oh, MD**  
Mount Sinai School of Medicine  
*Hormone Resistance*

\*subject to change





Helpline Panel



Speaker Q&A



Support Groups



Exhibit Hall



Special Guests

## FEATURING:

- **PRESENTATIONS FROM WORLD RENOWNED PHYSICIANS**
- **INFORMATION ON NEW RESEARCH, DRUGS, AND CLINICAL TRIALS**
- **LECTURES ON EVERY STAGE OF PROSTATE CANCER**
- **SESSIONS ON REDUCING SIDE EFFECTS AND MAXIMIZING QUALITY OF LIFE**
- **SUPPORT GROUP SESSIONS**
- **INFORMATION SESSIONS WITH PCRI'S HELPLINE STAFF**
- **EXHIBITS FEATURING ORGANIZATIONS & COMPANIES LEADING THE FIGHT AGAINST PROSTATE CANCER**
- **EXPLORE LOS ANGELES BY SIGNING UP FOR OUR EXCURSIONS**

***Register today at:***  
**WWW.PCRI.ORG**

For one weekend out of every year, PCRI holds a conference where patients gather together and collectively learn about the latest in prostate cancer care and lifestyle as well as treatments of landmark importance. The conference brings hundreds of patients, caregivers, support group leaders, and physicians together for a long weekend of lectures and interactive sessions.

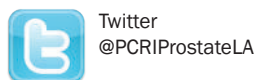
Patients will interact closely with the world's most knowledgeable physicians as well as recognized academic researchers, who have extensive experience or specialty in prostate cancer care and are from top notch medical institutions.

Our engaging faculty communicates this information in a way that the attendees can comprehend and apply to their own case, so they can take action. Over the course of the weekend, attendees often collaborate to help process and understand the wealth of information that is presented.

- **Roundtable discussion:** A panel where conference faculty discuss their medical opinions on real clinical cases.
- **Q&A with the Speakers:** Conference attendees may ask faculty specific questions in a more intimate setting.
- **Ask the Experts:** 90-minute interactive sessions that focus on topics such as Medical Oncology, Urology, Radiation Oncology, Immunotherapy, nutrition, a prostate-friendly lifestyle and much more.
- **Support Groups:** With the help of PCRI's partners and professional facilitators, support group meetings are available to patients and their significant others.
- **Exhibit Hall:** Ballroom where attendees view display booths and materials, interacting with representatives from exhibiting companies and partnering organizations.



Non-Profit Org.  
U.S. Postage  
**PAID**  
BULLSEYE  
MARKETING



# 2015 PROSTATE CANCER CONFERENCE

