



# Questions To Ask Your Doctor About Prostate Cancer Treatment

**Get The Facts. Take Control.**

<b>TELL ME ABOUT MY CONDITION</b>			
What is the grade and stage of my cancer?			
Why is this important?			
Is the tumor localized (located within the prostate gland)?			
<b>LET'S COMPARE TREATMENT OPTIONS</b>	<b>BRACHYTHERAPY</b>	<b>SURGERY</b>	<b>EXTERNAL BEAM RADIATION</b>
How long is the procedure?			
Is the procedure painful?			
What is the recovery period?			
How long will my routine activities be limited following treatment?			
What side effects and complications can I expect?			
What can I expect from a "quality of life" standpoint?			
<b>TELL ME ABOUT YOUR EXPERIENCE</b>	<b>BRACHYTHERAPY</b>	<b>SURGERY</b>	<b>EXTERNAL BEAM RADIATION</b>
How many procedures have you performed?			
What percentage of your patients remain cancer-free and for how long?			
What percentage of your patients experience incontinence following the procedure?			
How do you define incontinence?			
What percentage of your patients experience impotence following the procedure?			
How do you define impotence?			



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ADDITIONAL QUESTIONS	
What should I expect from follow-up visits? How often and how many will I need?	
Will treatment impact my ability to have children?	
What should I do if I still want to have children?	
If I select Brachytherapy as my treatment, how long should I limit direct contact?	
What is likely to happen if I choose watchful waiting?	
Should I get another opinion?	
Will the treatment you recommend cure my prostate cancer?	

# Compare Prostate Cancer Treatments

## Brachytherapy Treatment Advantages

	Compared to Robotic Prostatectomy	Brachytherapy
<b>Gastrointestinal Side Effects</b>	Very few GI or rectal side effects have been reported.	Acceptable side effects comparable to other treatments <sup>(1)</sup>
<b>Incontinence</b>	Higher degree of poor urinary function <sup>(1)</sup>	Less impact on urinary function than surgery <sup>(1)</sup>
<b>Impotence</b>	Higher degree of sexual dysfunction <sup>(1)</sup>	Higher degree of sexual function reported at three year follow up <sup>(1)</sup>
<b>Length of Procedure</b>	3-4 hours	45 minutes to 1 hour for complete implant
<b>Hospitalization</b>	Up to 4 days	Rarely required
<b>Length of time therapy has been in use</b>	Early reports of robotic surgery began in 2003 <sup>(2)</sup>	First ultra sound guided implant performed in 1985
<b>Published rates of effectiveness*</b>	83% control rates achieved at high volume centers <sup>(6)</sup>	Up to 99% of patients in long term studies <sup>(7)</sup>
	Compared to IMRT (External Beam Radiation)	Brachytherapy
<b>Gastrointestinal Side Effects</b>	Late rectal morbidity likely <sup>(4)</sup>	Occurs in approximately 9% of patients treated <sup>(5)</sup>
<b>Incontinence</b>	Urinary bother occurs in 12-40% of patients treated <sup>(4)</sup>	Urinary bother occurs in approximately 15% of patients
<b>Impotence</b>	Approximately 78% of patients maintain sexual function <sup>(8)</sup>	High degree of sexual function is maintained <sup>(1)</sup>
<b>Length of Treatment</b>	Five days per week for up to nine weeks.	45 minutes to 1 hour for complete implant
<b>Hospitalization</b>	Hospitalization is rarely required	Rarely required
<b>Length of time therapy has been in use</b>	IMRT adaptation acceleration began in 2003	First ultra sound guided implant performed in 1985
<b>Published rates of effectiveness*</b>	89% of patients in long term study (4)	Up to 99% of patients in long term studies <sup>(7)</sup>

# Compare Prostate Cancer Treatments

## Brachytherapy Treatment Advantages

	Compared to Proton Beam Therapy	Brachytherapy
<b>Gastrointestinal Side Effects</b>	Greater degree of late rectal side effects has been reported <sup>(8)</sup>	Occurs in approximately 9% of patients treated <sup>(5)</sup>
<b>Incontinence</b>	Urinary bother occurs in approximately 22% of patients <sup>(8)</sup>	Urinary bother occurs in approximately 15% of patients
<b>Impotence</b>	Similar percentages to IMRT <sup>(8)</sup>	High degree of sexual function is maintained <sup>(1)</sup>
<b>Length of Procedure</b>	Five days per week for up to nine weeks	45 minutes to 1 hour for complete implant
<b>Hospitalization</b>	Rarely required	Rarely required
<b>Length of time therapy has been in use</b>	Ten year data has been reported	First ultra sound guided implant performed in 1985
<b>Published rates of effectiveness*</b>	73% of patients in long term study <sup>(8)</sup>	Up to 99% of patients in long term studies <sup>(7)</sup>
	Compared to Cyber Knife	Brachytherapy
<b>Gastrointestinal Side Effects</b>	Occurs in approximately 12% of patients	Occurs in approximately 9% of patients treated <sup>(5)</sup>
<b>Incontinence</b>	31% of patients experience urinary bother <sup>(9)</sup>	Urinary bother occurs in approximately 15% of patients
<b>Impotence</b>	Not reported in papers reviewed	High degree of sexual function is maintained <sup>(1)</sup>
<b>Length of Treatment</b>	Up to one hour per treatment for five treatments typically over five to ten days	45 minutes to 1 hour for complete implant
<b>Hospitalization</b>	Rarely required	Rarely required
<b>Length of time therapy has been in use</b>	Typical reports have been over five years or less.	First ultra sound guided implant performed in 1985
<b>Published rates of effectiveness*</b>	94% of patients <sup>(9)</sup>	Up to 99% of patients in long term studies <sup>(7)</sup>

\*Effectiveness is defined as freedom from bio-chemical progression.

# References for Comparison Chart

1. "Quality of Life After Open or Robotic Prostatectomy, Cryoblation or Brachytherapy for Localized Prostate Cancer", John B. Malcolm et al, Journal of Urology, Vol 183, 1822-1829, May 2010
2. "Utilization and Outcomes of Minimally Invasive Radical Prostatectomy", Jim C. Hu et al, Journal of Clinical Oncology, Vol 24, Number 14, May 10 2008
3. "Proton Therapy for Prostate Cancer: the Initial Loma Linda University Experience", Jerry D. Slater et al, International Journal of Radiation Oncology, Biology and Physics, Vol. 59, Number 2, Pgs 348-352, 2004
4. "Comparison of Tumor Control and Toxicity Outcomes of High Dose Intensity Modulated Radiotherapy and Brachytherapy for Patients with Favorable Risk Prostate Cancer" Michael J. Zelefsky et al, Urology, Vol 77, Issue 4, Pgs 986-999, April 2011
5. "I-125 vs Pd-103 for Low Risk Prostate Cancer: Long Term Morbidity Outcomes From a Prospective Randomized Multicenter Controlled Trial", Andrew Herstein et al, The Cancer Journal, Vol 11, Number 5, Pgs 385-389, September/October 2005
6. "Robotic Prostatectomy FAQ's" City of Hope Web Site, 2012
7. "Brachytherapy in Men Aged  $\leq 54$  Years with Clinically Localized Prostate Cancer", Gregory S. Merrick et al, British Journal of Urology, Vol 98, Pgs 324-328, 2006
8. "Intensity-Modulated Radiation Therapy, Proton Therapy, or Conformal Radiation Therapy and Morbidity and Disease Control in Localized Prostate Cancer", Nathan C. Sheets et al, JAMA, Vol 307, Number 15, April 18, 2012
9. "Long Term Outcomes from a Prospective Trial of Stereotactic Body Radiotherapy for Low Risk Prostate Cancer", International Journal of Radiation Oncology, Biology and Physics, Vol 82, Number 2, Pgs 877-882, 2012



# What Experts Say About Brachytherapy Treatment

Independent clinical studies verify the effectiveness of brachytherapy treatment for localized prostate cancer. The following information describes expert conclusions:

## BRACHYTHERAPY LONG-TERM RESULTS

- Brachytherapy with Pd-103 produces a biochemical control rate better than or equal to surgery; 12-year research proves superior efficacy for high- and intermediate-risk patients. (*Sharkey, et. al., Brachytherapy, 2005*)
- Up to 12 years after treatment, brachytherapy produces long-term survival rates similar to radical prostatectomy and external beam radiation therapy. (*Potters, et. al., Journal of Urology, 2005*)

## BRACHYTHERAPY EFFECTIVENESS

- Brachytherapy can be an effective treatment for patients regardless of risk factor or age, and severe urinary or rectal complications are rare. (*Merrick, et. al., The Journal of Urology, 2003*)
- Pd-103 treatment has a remarkably high cure rate for higher risk prostate cancer patients. (*Dattoli, et. al., Cancer, 2003*)
- Nine years following TheraSeed® treatment, 83.5% of patients with a broad spectrum of Gleason scores were free of prostate cancer. (*Blasko, et. al., International Journal of Radiation Oncology Biology – Physics, 2000*)

## BRACHYTHERAPY COMPARISON TO OTHER TREATMENTS

- Cure rates are similar for localized prostate cancer patients treated with permanent seed implants, surgery, high-dose external beam radiotherapy and combined permanent seed implants with external beam radiotherapy. (*Kupelian, et. al., International Journal of Radiation Oncology Biology – Physics, 2004*)
- Patients with the best profile for a good surgical outcome also are the best candidates for brachytherapy. (*Peschel, et. al., The Lancet Oncology, 2003*)

## BRACHYTHERAPY COMPLICATIONS COMPARED TO SURGERY

- Brachytherapy produces a cure rate as high as surgery, and has a lower rate of complications, such as incontinence and impotence. (*Sharkey, et. al., Current Urology Reports, 2002*)

## OF NOTE

- Surgery frequently doesn't remove all cancer cells. Forty-seven percent of men undergoing radical prostatectomy had cancer cells remaining in the body following surgery for localized prostate cancer. (*Frank D. Gilliland, M.D., et. al., Journal of Urology, 1999*)