

# 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>

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## 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

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