

# Considering Surgery for Prostate Cancer?

Learn about minimally invasive  
**da Vinci® Surgery**



**da Vinci**.Surgery

# Surgery Options

Prostate cancer is the second most common cancer in men in the United States.<sup>1</sup> Fortunately, with early detection and proper medical care, the 5-year survival rate is almost 100%.<sup>2</sup> Your doctor will discuss all options with you in detail.

According to the American Urological Association's Guidelines for the Clinical Management of Prostate Cancer, "The major potential benefit of prostatectomy [surgery to remove the prostate] is a cancer cure in patients in whom the prostate cancer is truly localized."<sup>3</sup>

A prostatectomy can be performed with open surgery or minimally invasive surgery (robotic-assisted or laparoscopic).



**Open Surgery:** Surgery is done through one large incision (cut) in the abdomen which allows doctors to touch your organs as they operate.

**Minimally Invasive Surgery:** During minimally invasive surgery (robotic-assisted or traditional laparoscopic), surgeons operate through a few small incisions using long instruments and a tiny camera to guide doctors during surgery.

Robotic-assisted **da Vinci Surgery** also features:

- 3D HD vision system that gives surgeons a magnified view inside the body
- Tiny instruments that bend and rotate far greater than the human hand, and reduce hand tremors
- Enhanced vision, precision and control



# *da Vinci* Surgery:

## A Minimally Invasive Surgical Option

*da Vinci* Prostatectomy offers the following potential benefits compared to open surgery:

- › Similar positive surgical margin rates\*<sup>4-11</sup>
- › Faster return of erectile (sexual) function<sup>12,13</sup>
- › Better chance for return of urinary continence within 6 months<sup>12,13,14</sup>
- › Less blood loss<sup>10,12-15</sup> or need for a transfusion<sup>10,13-15</sup>
- › Fewer complications<sup>14,15</sup>
- › Lower risk of wound infection<sup>10,15</sup>
- › Shorter hospital stay<sup>10,12,14,16</sup>
- › Less chance of hospital readmission<sup>17,18</sup>
- › Fewer days with catheter<sup>12,19</sup>
- › Less risk of deep vein thrombosis\*\*<sup>10,20</sup>

*da Vinci* Prostatectomy offers the following potential benefits compared to traditional laparoscopy:

- › More patients return to pre-surgery erectile function at 12-month checkup<sup>21,22</sup>
- › Faster return of urinary continence<sup>6,22</sup>
- › Fewer complications<sup>10,23</sup>
- › Better nerve sparing rate<sup>24,25</sup>
- › Shorter hospital stay<sup>10,26</sup>

Your surgeon is 100% in control of the *da Vinci* System, which translates his/her hand movements into smaller, precise movements of tiny instruments inside your body.

**Over the past 20 years, the *da Vinci* System has brought minimally invasive surgery to more than 3 million patients worldwide.**

## **Risks & Considerations Related to Radical**

**Prostatectomy:** Leaking of urine, urgent need to urinate, cannot get or keep an erection, rectal or bowel injury, narrowing of the urethra, pooling of lymph fluid in the pelvic area or legs.

## **Important Information for Patients:**

Serious complications may occur in any surgery, including *da Vinci*<sup>®</sup> Surgery, up to and including death. Risks include, but are not limited to, injury to tissues and organs and conversion to other surgical techniques. If your doctor needs to convert the surgery to another surgical technique, this could result in a longer operative time, additional time under anesthesia, additional or larger incisions and/or increased complications. Individual surgical results may vary. Patients who are not candidates for non-robotic minimally invasive surgery are also not candidates for *da Vinci* Surgery. Patients should talk to their doctor to decide if *da Vinci* Surgery is right for them. Patients and doctors should review all available information on non-surgical and surgical options in order to make an informed decision. Please also refer to [www.daVinciSurgery.com/Safety](http://www.daVinciSurgery.com/Safety) for important safety information.

- \* Surgical margin: Surrounding tissue that is removed with the tumor. If cancer cells are found in this tissue, it's called a "positive surgical margin". If cancer cells are not found, it's called a "negative" or "clear margin".
- \*\* Deep vein thrombosis: Dangerous condition that occurs when a blood clot forms deep in the body.

For more information and to find a  
*da Vinci* surgeon near you, visit:  
[www.daVinciSurgery.com](http://www.daVinciSurgery.com)

1. American Cancer Society: Key statistics for prostate cancer. Available from: <http://www.cancer.org/cancer/prostatecancer/detailedguide/prostate-cancer-key-statistics> 2. American Cancer Society: Survival rates for prostate cancer. Available from: <http://www.cancer.org/cancer/prostatecancer/detailedguide/prostate-cancer-survival-rates> 3. Prostate cancer clinical guideline update panel. Guideline for the management of clinically localized prostate cancer: 2007 update. Linthicum (MD): American Urological Association Education and Research, Inc. 2007; 82. 4. De Carlo, F., F. Celestino, et al., Retropubic, Laparoscopic, and Robot-Assisted Radical Prostatectomy: Surgical, Oncological, and Functional Outcomes: A Systematic Review. *Urol Int*, 2014. 5. Laird, A., S. Fowler, et al., Contemporary practice and technique-related outcomes for radical prostatectomy in the UK: A report of national outcomes. *BJU International*, 2015. 115(5): p. 753-763. 6. Moran, P.S., M. O'Neill, et al., Robot-assisted radical prostatectomy compared with open and laparoscopic approaches: A systematic review and meta-analysis. *Int J Urol*, 2013. 20(3): p. 312-21. 7. Pan, X.W., X.M. Cui, et al., Robot-Assisted Radical Prostatectomy vs. Open Retropubic Radical Prostatectomy for Prostate Cancer: A Systematic Review and Meta-analysis. *Indian Journal of Surgery*, 2014. 8. Pearce, S.M., J.J. Pariser, et al., Comparison of Perioperative and Early Oncologic Outcomes Between Open and Robotic-Assisted Laparoscopic Prostatectomy in a Contemporary Population-Based Cohort. *J Urol*, 2016. 9. Seo, H.J., N.R. Lee, et al., Comparison of robot-assisted radical prostatectomy and open radical prostatectomy outcomes: A systematic review and meta-analysis. *Yonsei Medical Journal*, 2016. 57(5): p. 1165-1177. 10. Tewari, A., P. Sooriakumaran, et al., Positive Surgical Margin and Perioperative Complication Rates of Primary Surgical Treatments for Prostate Cancer: A Systematic Review and Meta-Analysis Comparing Retropubic, Laparoscopic, and Robotic Prostatectomy. *European Urology*, 2012. 62(1): p. 1-15. 11. Yaxley, J.W., G.D. Coughlin, et al., Robot-assisted laparoscopic prostatectomy versus open radical retropubic prostatectomy: early outcomes from a randomised controlled phase 3 study. *Lancet*, 2016. 12. Rocco B, Matei DV, et al. Robotic vs open prostatectomy in a laparoscopically naive centre: a matched-pair analysis. *BJU Int*. 2009 Oct;104(7):991-5. Epub 2009 May 5. 13. Ficarra V, Novara G, et al. A prospective, non-randomized trial comparing robot-assisted laparoscopic and retropubic radical prostatectomy in one European institution. *BJU Int*. 2009 Aug;104(4):534-9. 14. Health Information and Quality Authority (HIQA), reporting to the Minister of Health-Ireland. Health technology assessment of robot-assisted surgery in selected surgical procedures, 21 September 2011. <http://www.hiqa.ie/system/files/HTA-robot-assisted-surgery.pdf> 15. Carlsson S, Nilsson AE, et al. Surgery-related complications in 1253 robot-assisted and 485 open retropubic radical prostatectomies at the Karolinska University Hospital, Sweden. *Urology*. 2010 May;75(5):1092-7. 16. Lott F, Favorito L. Is previous experience in laparoscopic necessary to perform robotic radical prostatectomy? A comparative study with robotic and the classic open procedure in patients with prostate cancer. *Acta Cirurgica Brasileira*. 2015;30(3):229-234. doi:10.1590/s0102-8650201500300000011. 17. Fabbro E., Crivellaro S., et al. Robot-assisted laparoscopic prostatectomy: an economic analysis for decision-making in a university hospital of Northern Italy. *Epidemiology Biostatistics and Public Health* - 2015, Volume 12, Number 1. 18. Pilecki M.A., McGuire B.B., et al., National Multi-Institutional Comparison of 30-Day Postoperative Complication and Readmission Rates Between Open Retropubic Radical Prostatectomy and Robot-Assisted Laparoscopic Prostatectomy Using NSQIP. 2013, DOI: 10.1089/end.2013.0656. 19. Ryu J, Kwon T, et al. Retropubic Versus Robot-Assisted Laparoscopic Prostatectomy for Prostate Cancer: A Comparative Study of Postoperative Complications. 2013, *Korean J Urol* 2013;54:756-761. 20. Davis, J.W., Kreaden, U.S., et al. Learning Curve Assessment of Robot-Assisted Radical Prostatectomy Compared with Open-Surgery Controls from the Premier Perspective Database. 2013, DOI: 10.1089/end.2013.0534. 21. Asimakopoulos AD, Pereira Fraga CT, et al. Randomized comparison between laparoscopic and robot-assisted nerve-sparing radical prostatectomy. *J Sex Med*. 2011 May;8(5):1503-12. doi: 10.1111/j.1743-6109.2011.02215.x. Epub 2011 Feb 16. 22. Porpiglia F, Morra I, et al. Randomised Controlled Trial Comparing Laparoscopic and Robot-assisted Radical Prostatectomy. *Eur Urol*. 2012 Jul 20. [Epub ahead of print] 23. Sugihara, T., Yasunaga, H., et al. Robot-assisted versus other types of radical prostatectomy: Population-based safety and cost comparison in Japan, 2012–2013. *Cancer Sci* (2014) doi: 10.1111/cas.12523. 24. Wagenhoffer, R., Gruner, M. et al., Switching from Endoscopic Extraperitoneal Radical Prostatectomy to Robot-Assisted Laparoscopic Prostatectomy: Comparing Outcomes and Complications. 2015, *Urol Int* DOI: 10.1159/000376587. 25. Park, J.W., Lee, H.W., et al. Comparative Assessment of a Single Surgeon's Series of Laparoscopic Radical Prostatectomy: Conventional Versus Robot-Assisted. 2011, *Journal of Endourology*. DOI: 10.1089=end.2010.0229. 26. Ho C, Tsakonas E, et al. Robot-Assisted Surgery Compared with Open Surgery and Laparoscopic Surgery: Clinical Effective and Economic Analyses [Internet]. Ottawa: Canadian Agency for Drugs and Technologies in Health (CADTH); 2011 (Technology report no. 137).