

# Facing Kidney Cancer?

Learn why **da Vinci® Surgery**  
may be your best treatment option



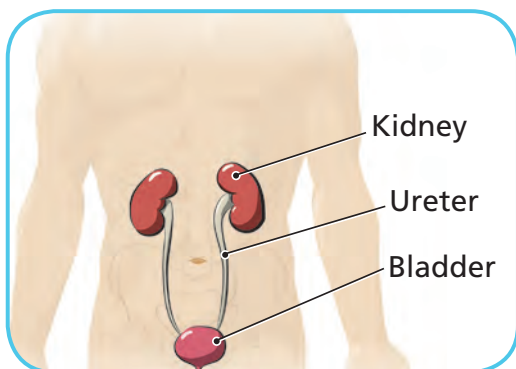
**da Vinci. Surgery**  
for kidney cancer

## Kidney Cancer

The kidneys are two small, fist-sized organs located behind the abdomen on each side of the spine. Their function is to produce urine, which is then stored in the bladder until it is emptied. By producing urine, kidneys remove toxic by-products and excess fluids from the body. This process helps to maintain a critical balance of salt, potassium and acid.

Each year, 54,000 Americans are diagnosed with kidney cancer and more than 13,000 die from this disease.<sup>1</sup> Overall, kidney cancer is slightly more common in men and is usually diagnosed between the ages of 50 and 70 years. The most common kidney cancer is renal cell carcinoma.

Fortunately, with early diagnosis and treatment, kidney cancer can be cured. If found early, the survival rate ranges from 79 to 100 percent.<sup>2</sup>



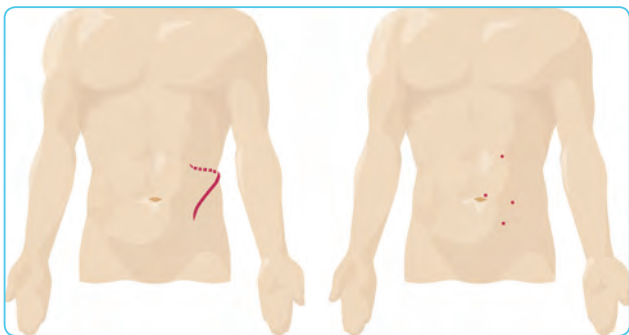
## Treatments

Kidney cancer is relatively resistant to non-invasive treatments like radiation and chemotherapy.<sup>3</sup> As a result, the *gold standard* treatment for localized kidney cancer is surgery.<sup>3</sup>

Kidney surgery is traditionally performed using an open approach, which requires a large abdominal incision. Another approach, conventional laparoscopy, is less invasive but limits the doctor's precision, visualization and control compared to open surgery.

*da Vinci* Surgery for kidney cancer uses the best techniques of open surgery and applies them to a robotic-assisted, minimally invasive approach.





Open Kidney Surgery  
Incision

*da Vinci* Surgery  
Incisions\*

The precision, vision and control of the *da Vinci* Surgical System allows your surgeon to provide a precise, minimally invasive treatment for kidney cancer. It may also provide your surgeon the means to preserve your kidney by removing the tumor and not the entire kidney.

Preserving your kidney can help prevent future kidney disease and even dialysis.

\*In certain cases, your doctor may need to remove the entire kidney. If so, he/she will enlarge one incision for removal.

*da Vinci* Surgery  
for Kidney Cancer:

## A Less Invasive Approach

If you have been diagnosed with kidney cancer, you may be a candidate for a very effective, minimally invasive approach — *da Vinci* Surgery.

*da Vinci* Surgery uses state-of-the-art technology to help your doctor perform a more precise operation as compared to conventional surgery. It offers numerous potential benefits over open surgery, including:

- › Significantly less pain<sup>4</sup>
- › Less blood loss & fewer transfusions<sup>5</sup>
- › Less risk of infection<sup>6</sup>
- › Less scarring<sup>4</sup>
- › Shorter hospital stay & recovery time<sup>6</sup>
- › Increased potential to preserve the kidney in certain cancer operations<sup>7</sup>
- › Better clinical outcomes, in many cases<sup>6</sup>

As with any surgery, these benefits cannot be guaranteed, as surgery is patient and procedure-specific.



## The Enabling Technology: *da Vinci* Surgical System

The *da Vinci* Surgical System is designed to provide surgeons with enhanced capabilities, including high-definition 3D vision and a magnified view. Your doctor controls the *da Vinci* System, which translates his or her hand movements into smaller, more precise movements of tiny instruments inside your body.



Though it is often called a “robot,” *da Vinci* cannot act on its own. Instead, the surgery is performed entirely by your doctor.

Together, *da Vinci* technology allows your doctor to perform complex procedures through just a few tiny openings. As a result, you may be able to get back to your normal activities faster — without the long recovery that usually follows open surgery.

The *da Vinci* System has been used successfully worldwide in hundreds of thousands of procedures to date.

<sup>1</sup>“Cancer Facts & Figures 2008,” American Cancer Society, [www.cancer.org](http://www.cancer.org/downloads/STT/2008CAFFfinalsecured.pdf), <http://www.cancer.org/downloads/STT/2008CAFFfinalsecured.pdf>. <sup>2</sup>“Kidney Cancer,” American Urological Association Foundation, [www.urologyhealth.org](http://www.urologyhealth.org), <http://www.urologyhealth.org/adult/index.cfm?cat=04&topic=124>. <sup>3</sup>Lane BR, Novick AC. Nephron-sparing surgery. *BJU Int.* 2007 May;99(5 Pt B):1245-50. <sup>4</sup>Ramaswamy, Sundaram P. Laparoscopic live-donor nephrectomy. University Hospital, Liverpool, UK, and Indiana University Hospital, Indianapolis, USA. January 2006. *British journal of urology*, volume 97, issue 6, June 2006, pages 1154-1160. <sup>5</sup>Nazemi T, Galich, et al. Radical nephrectomy performed by open, laparoscopy with or without hand-assistance or robotic methods. *Int. braz j urol.* vol.32 no.1 Rio de Janeiro Jan./Feb. 2006. <sup>6</sup>Renoult, Hubert, et al. Robot-assisted laparoscopic and open live-donor nephrectomy. *Nephrology Dialysis Transplantation* 2006 21(2):472-477. <sup>7</sup>Bhayani, S.B., Das N. Robotic-assisted laparoscopic partial nephrectomy for suspected renal cell carcinoma. *BMC Surgery* 2008, 8:16 doi:10.1186/1471-2482-8-16

Your doctor is one of a growing number of surgeons providing innovative surgical treatments like *da Vinci* Surgery.

*da Vinci* Surgery is setting a new standard for the treatment of **kidney cancer**.

For more information on *da Vinci* Surgery, please visit:

**[www.daVinciSurgery.com](http://www.daVinciSurgery.com)**

