

Kidney Cancer Treatment

Urology Care
FOUNDATION™
*The Official Foundation of the
American Urological Association*

What is Kidney Cancer?

A kidney mass, or tumor, is an abnormal growth in the kidney. Some kidney masses are benign (not cancerous) and some are malignant (cancerous). One in four kidney masses less than 4 cm are benign. There are many different kinds of kidney cancer. The most common ones are:

- **Renal Cell Carcinoma (RCC):** These are the most common malignant kidney tumors. They are found in the lining of the small tubes in the kidney. RCC may form as a single tumor within a kidney, or as two or more tumors in one or both kidneys.
- **Benign Kidney Tumors:** About 20% of tumors removed from kidneys are benign. There are about nine named tumors in this class. Some can grow quite large but they are almost always non-cancerous and do not spread to other organs.
- **Wilms Tumor:** Wilms tumors almost always occur in children and are rarely found in adults.

How is Kidney Cancer Diagnosed?

Over half of kidney masses are found by chance. Often they are found during imaging for another symptom or when you see a doctor about some other problem.

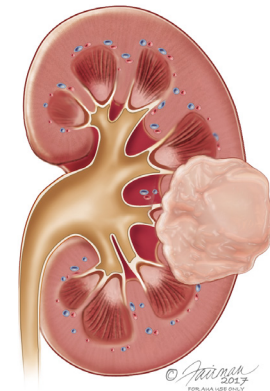
Treatment options are based on the grade and stage of cancer found, whether or not it has spread and your general health. A tumor grade tells how aggressive the cancer cells are in your body. A tumor stage tells how much the cancer has spread.

- **Stage I and II tumors** include cancers of any size that are only inside the kidney.
- **Stage III tumors** are either locally invasive or involve

lymph nodes. This cancer is only found within the kidney organ.

- **Stage IV tumors** have spread beyond the kidney into organs nearby or distant metastases.

Stage 3 Tumor



How is Kidney Cancer Treated?

The main goal in treating kidney masses is to cure you of the cancer and to protect kidney function where possible. Protecting kidney function is especially important for patients with only one kidney or some other kidney disease. Your doctor may recommend one of these treatment choices:

Active Surveillance

For active surveillance, your doctor will see you for tests to watch small masses less than 3 cm in size. The goal is to prevent progression and avoid potential risks and negative effects of other treatments. Your visits will be every three, six or twelve-months as necessary. How often you see your doctor will depend on tumor size and stage.

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Kidney Cancer

Treatment

Ablation

If your tumor is small (less than 3 cm in size), your surgeon may consider ablation. Ablation destroys the tumor with extreme heat or cold.

- **Cryoablation** (cold ablation) is when very cold gases are passed to the tumor through a probe to destroy the tumor cells.
- **Radiofrequency ablation** (hot ablation) is when an electric current is used to heat the tumor and destroys the cells.

Partial Nephrectomy

Partial nephrectomy means the doctor removes the tumor and part of the kidney. If your tumor is 4 cm or less, your doctor may suggest a partial nephrectomy. A partial nephrectomy can also be done for larger tumors.

Radical Nephrectomy

During a radical nephrectomy, the whole kidney is removed. This is done if your kidney tumor shows signs of becoming cancerous or is very large. Your body can function well with one kidney if the other is removed.

Targeted Therapy

Targeted therapy uses drugs that can kill just the kidney cancer cells in the body. They are used to block proteins or new blood vessels that the cancer cells need in order to grow. These treatments are typically used for advanced (metastatic) disease. Targeted therapy has been shown to shrink kidney tumors or slow their growth.

Immunotherapy

Immunotherapy is a way to jump-start our immune system to fight cancer. The immune system is the body's natural defense against diseases. These treatments can shrink kidney tumors in a small percent of patients.

Radiation Therapy

Radiation therapy is used to relieve the symptoms of kidney cancer, rather than as a cure. It uses high-energy radiation to shrink the kidney cancer cells that metastasize to other organs such as the brain or bones. Bone pain can be relieved by radiation. It can be used alone or with other therapies.

Chemotherapy

Kidney cancer cells are usually resistant to chemotherapy. However, these drugs may be used if targeted drugs and/or immunotherapy have not worked or for rare tumor types. It is important to ask about how to manage chemotherapy side effects before starting.

What Can I Expect After Treatment?

The speed of your recovery depends on your treatment and overall health. After treatment, you will need continued checkups to watch for a re-growth of cancer. The frequency of these visits will vary according to the grade and stage of your kidney cancer and should continue at least yearly throughout your life. If your surgeon removed one kidney, and the remaining kidney works well, you should enjoy a good quality of life and health.

About the Urology Care Foundation

The Urology Care Foundation is the world's leading urologic Foundation—and the official Foundation of the American Urological Association. We provide information for those actively managing their urologic health and those ready to make healthy changes in their lives. Our information is based on the American Urological Association resources and is reviewed by medical experts.

To learn more about different urologic issues visit **UrologyHealth.org/UrologicConditions**. Go to **UrologyHealth.org/FindAUrologist** to find a doctor near you.

Disclaimer

This information is not a tool for self-diagnosis or a substitute for professional medical advice. It is not to be used or relied on for that purpose. Please talk to your urologist or health care provider about your health concerns. Always consult a health care provider before you start or stop any treatments, including medications.

For more information about other urologic conditions, visit **UrologyHealth.org/Download** or call 800-828-7866.

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