

Wilms Tumor - Childhood - Treatment Options [1]

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ON THIS PAGE: You will learn about the different ways doctors use to treat children with this type of tumor. To see other pages, use the menu on the side of your screen.

In general, cancer in children is uncommon, so it can be hard for doctors to plan treatments unless they know what has been most effective in other children. That's why more than 60% of children with cancer are treated as part of a clinical trial. [Clinical trials](#) [3] are research studies that compare standard treatments (the best proven treatments available) with newer approaches to treatments that may be more effective. Clinical trials may test such approaches as a new drug, a new combination of standard treatments, or new doses of current therapies. Studying new treatments involves careful monitoring using scientific methods, and all participants are followed closely to track their health and progress.

Wilms tumor is a success story for improving the prognosis of children with cancer using clinical trials involving chemotherapy, surgery, and radiation therapy. To take advantage of these newer treatments, all children with cancer should be treated at a specialized cancer center. Doctors at these centers have extensive experience in treating children with cancer and have access to the latest research. A doctor who specializes in treating children with cancer is called a pediatric oncologist. In many cases, a team of doctors works with a child and the family to provide care; this is called a [multidisciplinary team](#) [4]. Pediatric cancer centers often have extra support services for children and their families, such as child life specialists, nutritionists, physical and occupational therapists, social workers, and counselors. Special activities and programs to help your child and family cope may also be available.

Descriptions of the most common treatment options for Wilms tumor are listed below. The main treatments for Wilms tumor are surgery, chemotherapy, and radiation therapy. Treatment options and recommendations depend on several factors, including the type and stage of cancer, possible side effects, and the child and family's preferences and overall health. Your child's care plan may also include treatment for symptoms and side effects, an important part of cancer care. Take time to learn about all of your child's treatment options and be sure to ask questions about things that are unclear. Also, talk about the goals of each treatment with your child's doctor and what you and your child can expect while receiving the treatment. Learn more about [making treatment decisions](#) [5].

Surgery

Surgery is the removal of the tumor and surrounding tissue during an operation. Surgery is a common treatment for all stages of Wilms tumor. It will usually be performed by either a pediatric surgeon with experience removing cancer in children or a pediatric urologist. A pediatric urologist is a doctor who specializes in treating urinary tract problems in children. The types of surgery used include the following:

Radical nephrectomy. A radical nephrectomy is the removal of the whole kidney and some surrounding tissue, as well as nearby lymph nodes. The surgical removal of the lymph nodes is called a lymph node dissection.

Partial nephrectomy. A partial nephrectomy is the removal of the tumor and some of the surrounding kidney, leaving as much of the kidney as possible.

When one kidney is removed, the other kidney takes over the full job of filtering wastes from the body. A partial nephrectomy is performed when the other kidney is damaged, also contains a tumor, or has already been removed. Dialysis, a mechanized filtering process, may also be used if this is not possible. Talk with the health care team about the possible side effects of your child's specific surgery and how they can be reduced or relieved.

Learn more about [surgery](#) [6].

Chemotherapy

Chemotherapy is the use of drugs to destroy cancer cells, usually by stopping the cancer cells' ability to grow and divide. Chemotherapy for Wilms tumor is given by a pediatric oncologist.

Systemic chemotherapy is delivered through the bloodstream to reach cancer cells throughout the body. Chemotherapy for Wilms tumor is usually given through an intravenous (IV) tube placed into a vein using a needle. A chemotherapy regimen (schedule) usually consists of a specific number of cycles given over a set period of time. A patient may receive one drug at a time or combinations of different drugs at the same time. Common drugs for Wilms tumor with a favorable histology include dactinomycin (Cosmegen), doxorubicin (Adriamycin), and vincristine (Vincasar PFS, Oncovin). Other drugs being used to treat Wilms tumor include cyclophosphamide (Cytosan, Neosar), etoposide (VePesid, Toposar), and irinotecan (Camptosar).

Chemotherapy may be given after surgery to eliminate any remaining cancer cells, called adjuvant chemotherapy. Sometimes, chemotherapy is given before surgery to shrink a tumor if it is too large to remove, or if it is growing into blood vessels or other organs that make it too risky to remove.

The side effects of chemotherapy depend on the individual and the dose used, but they can include fatigue, risk of infection, nausea and vomiting, hair loss, loss of appetite, and diarrhea. These side effects usually go away once treatment is finished.

Learn more about [chemotherapy](#) [7] and [preparing for treatment](#) [8]. The medications used to

treat cancer are continually being evaluated. Talking with your child's doctor is often the best way to learn about the medications prescribed for your child, their purpose, and their potential side effects or interactions with other medications. Learn more about your child's prescriptions by using [searchable drug databases](#) [9].

Radiation therapy

Radiation therapy is the use of high-energy x-rays or other particles to destroy cancer cells. A doctor who specializes in giving radiation therapy to treat cancer is called a radiation oncologist. The most common type of radiation treatment is called external-beam radiation therapy, which is radiation therapy given from a machine outside the body. When radiation treatment is given using implants, it is called internal radiation therapy or brachytherapy. A radiation therapy regimen (schedule) usually consists of a specific number of treatments given over a set period of time.

Radiation therapy may be used to treat a large tumor or a tumor that has spread to other parts of the body. It may also be used to shrink a tumor before surgery or destroy cancer cells that remain after surgery. Radiation therapy is generally part of the treatment plan for children with stage III or IV Wilms tumor with a favorable histology and for all children who have tumors with an anaplastic histology (see the [Stages](#) [10] section for a description of these terms).

Side effects from radiation therapy depend on the part of the body treated. For example, side effects from radiation therapy to the abdomen can include fatigue, mild skin reactions, upset stomach, and loose bowel movements. Most side effects go away soon after treatment is finished.

Learn more about [radiation therapy](#) [11].

Getting care for symptoms and side effects

Cancer and its treatment often cause side effects. In addition to treatment to slow, stop, or eliminate the cancer, an important part of cancer care is relieving a child's symptoms and side effects. This approach is called palliative or supportive care, and it includes supporting your child with his or her physical, emotional, and social needs.

Palliative care can help a child at any stage of illness. Children often receive treatment for the cancer and treatment to ease side effects at the same time. In fact, patients who receive both often have less severe symptoms, better quality of life, and report they are more satisfied with treatment.

Palliative treatments vary widely and often include medication, nutritional changes, relaxation techniques, and other therapies. Your child may also receive palliative treatments similar to those meant to eliminate the cancer, such as chemotherapy, surgery, and radiation therapy. Talk with your child's doctor about the goals of each treatment in his/her treatment plan.

Before treatment begins, talk with your child's health care team about the possible side effects of his/her specific treatment plan and supportive care options. And during and after treatment, be sure to tell your child's doctor or another health care team member if your child is experiencing a problem so it is addressed as quickly as possible.

Learn more about [palliative care](#) [12].

Remission and the chance of recurrence

A remission is when cancer cannot be detected in the body and there are no symptoms. This may also be called "no evidence of disease" or NED.

A remission can be temporary or permanent. This uncertainty leads to many survivors and their families feeling worried or anxious that the cancer will come back. While many remissions are permanent, it's important to talk with your child's doctor about the possibility of your child's cancer returning. Understanding the risk of recurrence and the treatment options may help you and your child feel more prepared if the cancer does return. Learn more about [coping with the fear of recurrence](#) [13].

If the cancer does return after the original treatment, it is called recurrent cancer. It may come back in the same place (called a local recurrence), nearby (regional recurrence), or in another place (distant recurrence).

When this occurs, a cycle of testing will begin again to learn as much as possible about the recurrence, including whether the tumor's stage has changed. After testing is done, your child's doctor will talk with you about treatment options. Often the treatment plan will include the therapies described above, such as surgery, radiation therapy, and chemotherapy, but they may be used in a different combination or given at a different pace. Your child's doctor may also suggest clinical trials that are studying new ways to treat this type of recurrent cancer, including new medications.

The treatment plan for recurrent Wilms tumor depends on four factors:

- Where in the body the cancer has returned
- The type of treatment your child received for the original tumor
- How long it has been since the original cancer was treated
- Whether the new growth has a [favorable or anaplastic histology](#) [10]

When cancer recurs, patients and their families often experience emotions such as disbelief or fear. Families are encouraged to talk with their health care team about these feelings and ask about support services to help them cope. Learn more about [dealing with cancer recurrence](#) [14].

If treatment fails

Although treatment is successful for the majority of children with Wilms tumor, sometimes it is not. If a child's cancer cannot be cured or controlled, this is called advanced or terminal cancer. This diagnosis is stressful, and it may be difficult to discuss. However, it is important to have open and honest conversations with your child's doctor and health care team to express your family's feelings, preferences, and concerns. The health care team is there to help, and many team members have special skills, experience, and knowledge to support patients and their families.

Parents or guardians are encouraged to think about where their child would be most comfortable:

at home, in a home-like setting elsewhere, in the hospital, or in a hospice environment. Hospice care is a type of palliative care for people who are expected to live less than six months. It is designed to provide the best possible quality of life for people who are near the end of life. Nursing care and special equipment can make staying at home a workable alternative for many families. Some children may be happier if they can arrange to attend school part-time or keep up other activities and social connections. Your child's health care team can help you decide on an appropriate level of activity. Making sure a child is physically comfortable and free from pain is extremely important as part of end-of-life care. Learn more about [caring for a terminally ill child](#) [15] and [advanced cancer care planning](#) [16].

The death of a child is an enormous tragedy, and families may need support to help them cope with the loss. Pediatric cancer centers often have professional staff and support groups to help with the process of grieving. Learn more on [grieving the loss of a child](#). [17]

The next section helps explain clinical trials, which are research studies. Use the menu on the side of your screen to select About Clinical Trials, or you can select another section, to continue reading this guide.

Links:

[1] <http://www.cancer.net/cancer-types/wilms-tumor-childhood/treatment-options>

[2] <http://www.cancer.net/about-us>

[3] <http://www.cancer.net/node/19344>

[4] <http://www.cancer.net/node/25356>

[5] <http://www.cancer.net/node/24582>

[6] <http://www.cancer.net/node/24462>

[7] <http://www.cancer.net/node/24723>

[8] <http://www.cancer.net/node/24473>

[9] <http://www.cancer.net/node/25369>

[10] <http://www.cancer.net/node/19342>

[11] <http://www.cancer.net/node/24661>

[12] <http://www.cancer.net/node/25282>

[13] <http://www.cancer.net/node/25241>

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[15] <http://www.cancer.net/node/25280>

[16] <http://www.cancer.net/node/25113>

[17] <http://www.cancer.net/node/25288>