Ewing Sarcoma - Childhood - Latest Research [1]

This section has been reviewed and approved by the Cancer.Net Editorial Board [2], 05/2015

ON THIS PAGE: You will read about the scientific research being done now to learn more about this type of cancer and how to treat it. To see other pages, use the menu on the side of your screen.

Doctors are working to learn more about Ewing sarcoma, how to best treat it, and how to provide the best care to children and teens diagnosed with this disease. The following areas of research may include new options for patients through clinical trials. Always talk with your child?s doctor about the diagnostic and treatment options best for your child.

- **New chemotherapy.** Researchers are evaluating the use of cyclophosphamide, topotecan, and vincristine in addition to standard chemotherapy for patients with newly diagnosed, localized Ewing sarcoma.
- **Allogeneic stem cell transplantation.** In an ALLO stem cell transplant (see the Treatment Options [3] section for a description), the child is treated with high doses of chemotherapy and/or radiation therapy to destroy as many tumor cells as possible and to prevent the child's immune system from rejecting the donated stem cells. After the high-dose therapy is given, stem cells obtained from a healthy donor, usually a sibling, are infused into the patient's bloodstream. ALLO stem cell transplants combined with sirolimus (Rapamune) and other drugs have been shown to inhibit growth of Ewing cells in the laboratory.
- **Bilateral lung radiation.** The effectiveness of bilateral lung radiation is being examined in patients with metastatic Ewing sarcoma. During this treatment, radiation therapy is given to both lungs after the child has completed chemotherapy. For some patients, autologous (AUTO) stem cell transplant is recommended.
- **Insulin-like growth factor receptor-1 (IGF-1R) antibodies.** The IGFR is an important growth protein for sarcomas. Blocking its activity may be an important new way to improve sarcoma treatment. This new type of treatment is being studied in combination with chemotherapy for people newly diagnosed with metastatic Ewing sarcoma.
- **Palliative care**. Clinical trials are underway to find better ways of reducing symptoms and side effects of current Ewing sarcoma treatments in order to improve patients? comfort and quality of life.

Looking for More About the Latest Research?

If you would like additional information about the latest areas of research regarding Ewing sarcoma, explore these related items that will take you outside of this guide:

- To find clinical trials specific to your child?s diagnosis, talk with your child?s doctor or search online clinical trial databases now [4].
- Visit ASCO?s CancerProgress.Net [5] website to learn more about the historical pace of research for childhood cancer. Please note this link takes you to a separate ASCO website.
- Visit the website of the Conquer Cancer Foundation [6] to find out how to help support research for every cancer type. Please note this link takes you to a separate ASCO website.

The next section in this guide is Coping with Side Effects [7]*, and it offers some guidance in how to cope with the physical, emotional, and social changes that cancer and its treatment can bring. Or, use the menu on the side of your screen to choose another section to continue reading this guide.*

Links:
[1] http://www.cancer.net/cancer-types/ewing-sarcoma-childhood/latest-research
[2] http://www.cancer.net/about-us
[3] http://www.cancer.net/node/18804
[4] http://www.cancer.net/node/24878
[5] http://www.cancerprogress.net/timeline/pediatric-cancer
[6] http://www.conquercancerfoundation.org/get-involved
[7] http://www.cancer.net/node/18806