

Sarcoma, Soft Tissue - Latest Research [1]

This section has been reviewed and approved by the [Cancer.Net Editorial Board \[2\]](#), 07/2014

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 sarcoma, ways to prevent it, how to best treat it, and how to provide the best care to people diagnosed with this disease. The following areas of research may include new options for patients through [clinical trials \[3\]](#). Always talk with your doctor about the diagnostic and treatment options best for you.

Proton therapy. Proton therapy is a type of external-beam radiation treatment that uses protons rather than x-rays. At high energy, protons can destroy cancer cells. Learn more about [proton therapy \[4\]](#). Radiation treatment with heavier charged particles, known as carbon ions, are being used and studied for the treatment of sarcomas in Japan and Germany.

Improved drug delivery. Some chemotherapy drugs are incorporated into fat molecules called liposomes to improve the absorption and distribution of the drug in the patient's body.

New chemotherapy drugs. New chemotherapy is being developed and tested that may be effective in treating some subtypes of STS. An example is trabectedin (Yondelis), which has been approved in Europe. Trabectedin has been shown to have a very high level of activity in the treatment of a specific subtype of liposarcoma called myxoid-round cell liposarcoma. However, in the United States, FDA only allows patients access to it under special circumstances. Meanwhile, eribulin (Halaven), a drug approved for treatment of breast cancer, has shown promising results in an early trial in Europe and is now being investigated in a large, international study. Researchers are also working to find versions of standard chemotherapy to treat sarcoma that cause fewer side effects. For example, two new versions of ifosfamide—called glufosfamide and TH-302—are being studied in ongoing clinical trials. Learn more about [drug development and approval \[5\]](#).

Targeted therapy. As explained in the [Treatment \[6\]](#) section, several targeted therapies have been approved to treat specific types of sarcoma recently, and this is an active area of research for sarcoma overall. Currently, researchers are identifying new kinase inhibitors and evaluating the order that the drugs should be used in a patient's treatment plan.

For instance, regorafenib is a new targeted therapy used frequently in patients with advanced GIST [7] who have already been treated with imatinib and sunitinib. The FDA is currently reviewing a phase III clinical trial of this drug.

Other clinical trials are looking at a type of targeted therapy called anti-angiogenesis therapy [8]. It is focused on stopping angiogenesis, which is the process of making new blood vessels. Because a tumor needs the nutrients delivered by blood vessels to grow and spread, the goal of anti-angiogenesis therapies is to "starve" the tumor.

Targeted oncogene treatments. Drugs are being researched that may block one or more of the proteins found in tumor cells that help the tumor grow and spread.

Tumor genetics. Researchers are learning that some sarcomas have unique genetic "fingerprints." Understanding these fingerprints may help doctors determine better treatments and possibly better predict a patient's prognosis. A number of cancer centers and companies now offer genetic tests of cancers to determine if people with sarcoma might benefit from newer treatments.

Supportive care. Clinical trials are underway to find better ways of reducing symptoms and side effects of current sarcoma treatments in order to improve patients' comfort and quality of life.

Looking for More About the Latest Research?

To find clinical trials specific to your diagnosis, talk with your doctor or search online clinical trial databases [9] now.

The next section addresses how to cope with the symptoms of the disease or the side effects of its treatment. Use the menu on the side of your screen to select Coping with Side Effects, or you can select another section, to continue reading this guide.

Links:

[1] <http://www.cancer.net/cancer-types/sarcoma-soft-tissue/latest-research>

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

[3] <http://www.cancer.net/node/19612>

[4] <http://www.cancer.net/node/24521>

[5] <http://www.cancer.net/node/24505>

[6] <http://www.cancer.net/node/19611>

[7] <http://www.cancer.net/node/31299>

[8] <http://www.cancer.net/node/24376>

[9] <http://www.cancer.net/node/24878>