



Treating Uterine Sarcoma

Considering treatment options

After the diagnostic tests are done, your cancer care team will recommend one or more treatment options. Don't feel rushed about making a decision. If there is anything you do not understand, ask to have it explained again. The choice of treatment depends largely on the type of cancer and [stage](#) of the disease when it is diagnosed. Other factors might play a part in choosing the best treatment plan. These could include your age, your overall state of health, whether you plan to have children, and other personal considerations. Be sure you understand all of the risks and side effects of different treatment options before making a decision.

From the start, keep in mind that you will be dealing with your own body and emotions. While you are deciding what kind of treatment to have, you will find it helpful to discuss options with your family and friends, as well as with your primary care doctor and nurse. At every step of the way, before treatment, during treatment, and in recovery, you should talk with your [cancer care team](#) about side effects and ways to avoid them or make them easier to handle. They want to answer your questions, so ask them! See "[What should you ask your doctor about uterine sarcoma](#)" for possible questions to ask.

You might want to get a second opinion. This can provide more information and help you feel confident about the treatment plan you choose. Some insurance companies require a second opinion before they will pay for certain treatments, but a second opinion is usually not required for routine cancer treatments.

These are the basic types of treatment for women with uterine sarcoma:

- [Surgery](#)
- [Radiation therapy](#)
- [Chemotherapy](#)
- [Hormone therapy](#)

A combination of these treatments may be used. Which treatment--or treatments-- are used [depends on the type and stage](#) of your cancer as well as your overall medical condition. Most women with uterine sarcoma have surgery to remove the cancer. Radiation, chemotherapy, and hormonal therapy are sometimes given to lower the risk of the cancer coming back after surgery. These treatments may also be used for cancers that cannot be removed with surgery or when a woman can't have surgery because she has other health problems.

Thinking about taking part in a clinical trial

Clinical trials are carefully controlled research studies that are done to get a closer look at promising new treatments or procedures. Clinical trials are one way to get state-of-the-art cancer treatment. In some cases, they may be the only way to get access to newer treatments. They are also the best way for doctors to learn better methods to treat cancer. Still, they are not right for everyone.

If you would like to learn more about clinical trials that might be right for you, start by asking your doctor if your clinic or hospital conducts clinical trials. You can also call our clinical trials matching service at 1-800-303-5691 for a list of studies that meet your medical needs, or see the [Clinical Trials](#) section on our website to learn more.

Considering complementary and alternative methods

You may hear about alternative or complementary methods that your doctor hasn't mentioned to treat your cancer or relieve symptoms. These methods can include vitamins, herbs, and special diets, or other methods such as acupuncture or massage, to name a few.

Complementary methods refer to treatments that are used along with your regular medical care. Alternative treatments are used instead of a doctor's medical treatment. Although some of these methods might be helpful in relieving symptoms or helping you feel better, many have not been proven to work. Some might even be dangerous.

Be sure to talk to your cancer care team about any method you are thinking about using. They can help you learn what is known (or not known) about the method, which can help you make an informed decision. See the [Complementary and Alternative Medicine](#) section of our website to learn more.

Help getting through cancer treatment

Your cancer care team will be your first source of information and support, but there are other resources for help when you need it. Hospital- or clinic-based support services are an important part of your care. These might include nursing or social work services, financial aid, nutritional advice, rehab, or spiritual help.

The American Cancer Society also [has programs and services](#) – including rides to treatment, lodging, support groups, and more – to help you get through treatment. Call our National Cancer Information Center at 1-800-227-2345 and speak with one of our trained specialists on call 24 hours a day, every day.

The treatment information given here is not official policy of the American Cancer Society and is not intended as medical advice to replace the expertise and judgment of your cancer care team. It is intended to help you and your family make informed decisions, together with your doctor. Your doctor may have reasons for suggesting a treatment plan different from these general treatment options. Don't hesitate to ask him or her questions about your treatment options.

For information about some of the most common approaches used based on the extent of the disease, see the section “ [Treatment options for uterine sarcoma, by stage.](#)”

Surgery for Uterine Sarcomas

Surgery is the main (primary) treatment for uterine sarcoma. The major goal of surgery is to remove all of the cancer. This usually means removing the uterus, but in some cases the fallopian tubes, ovaries, and part of the vagina may also need to be removed. Some lymph nodes or other tissue may be taken out as well to see if the cancer has spread outside the uterus. Which procedures are done depend on the [type](#) and grade of the cancer and how far it has spread (see [How is uterine sarcoma staged?](#)). The patient's general health and age are also important factors. In some cases, tests done before surgery allow the doctor to plan the operation in detail ahead of time. These tests include imaging studies, such as CT scans, MRIs, chest X-rays and ultrasound, as well as a pelvic examination, endometrial biopsy, and/or D&C. In other cases, the surgeon has to decide which options to take based on what is found during surgery. For example, sometimes there is no way to know for certain that a tumor is cancer until it is removed during surgery.

Hysterectomy

This surgery removes the whole uterus (the body of the uterus and the cervix). This procedure is sometimes called a *simple hysterectomy* or a *total hysterectomy*. In a

simple hysterectomy, the loose connective tissue around the uterus (parametrium), the tissue connecting the uterus and sacrum (uterosacral ligaments), and the vagina remain intact. Removing the ovaries and fallopian tubes is not actually part of a hysterectomy—officially it is a separate procedure known as a *bilateral salpingo-oophorectomy* (BSO). The BSO is often done along with a hysterectomy in the same operation (see below).

If the uterus is removed through an incision in the front of the abdomen, the surgery is called an *abdominal hysterectomy*. When the uterus is removed through the vagina, it is called a *vaginal hysterectomy*. If the lymph nodes need to be removed and tested, this can be done through the same incision as the abdominal hysterectomy. If a hysterectomy is done through the vagina, lymph nodes can be removed using a laparoscope. A laparoscope is a thin lighted tube with a video camera at the end. It can be inserted into the body through a small incision (cut) and allows the doctor to see inside the patient without making a big incision. The doctor can use surgical instruments that are inserted through other small incisions to operate. The laparoscope is sometimes used to help remove the uterus when the doctor is doing a vaginal hysterectomy. This is called a *laparoscopic assisted vaginal hysterectomy*. The uterus can also be removed through the abdomen with a laparoscope, sometimes using a robot, as well. Laparoscopic procedures require less recovery time than a regular abdominal hysterectomy but often the surgery takes longer. You should talk with your surgeon about what approach will be used and why it is the best for you.

Either general or regional anesthesia is used for the procedure--this means that the patient is asleep or sedated and numb from the waist down. For an abdominal hysterectomy the hospital stay is usually 3 to 5 days. Complete recovery takes about 4 to 6 weeks. A laparoscopic procedure and vaginal hysterectomy usually require a hospital stay of 1 to 2 days and 2 to 3 weeks recovery. After a hysterectomy, a woman cannot become pregnant and give birth to children. Surgical complications are uncommon but could include excessive bleeding, wound infection, and damage to the urinary or intestinal systems.

Radical hysterectomy

This operation removes the entire uterus as well as the tissues next to the uterus and cervix (parametrium and uterosacral ligaments) and the upper part (about 1 inch) of the vagina (near the cervix). This operation is used more often for cervical carcinomas than for uterine sarcomas.

Radical hysterectomy is most often done through an abdominal surgical incision, although it can also be performed through the vagina or laparoscopically with or without

the assistance of the DaVinci[®] robot. Most patients undergoing a radical hysterectomy also have some lymph nodes removed, either through the abdominal incision or laparoscopically. Radical hysterectomy can be done using either general or regional anesthesia.

Because more tissue is removed by a radical hysterectomy than with a simple hysterectomy, the hospital stay may be longer. The surgery leaves the woman unable to become pregnant and give birth to children. Complications are similar to, but more common than those associated with a simple hysterectomy and could include excessive bleeding, wound infection, and damage to the urinary or intestinal systems. If some of the nerves of the bladder are damaged, a catheter will be needed to empty the bladder for some time after surgery. This usually improves and the catheter can be removed later.

Bilateral salpingo-oophorectomy

This operation removes both fallopian tubes and both ovaries. In treating endometrial carcinomas and uterine sarcomas, this operation is usually done at the same time the uterus is removed (either by simple hysterectomy or radical hysterectomy). If both of your ovaries are removed, you will go into menopause if you have not done so already.

Symptoms of menopause include hot flashes, night sweats, and vaginal dryness. These symptoms are caused by a lack of estrogen and may be improved with estrogen therapy. This therapy also lowers a woman's risk of osteoporosis (weakening and thinning of the bones). However, since estrogen can cause some types of uterine sarcoma to grow, many doctors are concerned that it could increase the chance of the cancer coming back. Most experts in this field consider estrogen therapy too risky for most women who have had uterine sarcoma. Some doctors prescribe it only when the [stage](#) and grade of the cancer indicate a very low risk of the cancer coming back. A woman who has had uterine sarcoma should discuss the risks and benefits of estrogen therapy with her doctor before making a decision. Other treatments can be used to help relieve symptoms of menopause and prevent osteoporosis that do not affect the risk of the cancer coming back.

Lymph node surgery

Your surgeon may do a procedure called a *lymph node dissection* or a *lymph node sampling*, which removes lymph nodes in the pelvis and around the aorta (the main artery that runs from the heart down along the back of the abdomen and pelvis). These lymph nodes are examined under a microscope to see if they contain cancer cells. If cancer is found in the lymph nodes, it means that the cancer has already spread outside

of the uterus. This carries a poor prognosis (outlook). This operation is done through the same surgical incision in the abdomen as the simple abdominal hysterectomy or radical abdominal hysterectomy. If a vaginal hysterectomy has been done, the lymph nodes can be removed with laparoscopic surgery.

Removing lymph nodes in the pelvis can lead to a buildup of fluid in the legs, a condition called *lymphedema*. This occurs more often if radiation is given after surgery. More information about lymphedema can be found in [Lymphedema](#).

Other procedures that may be done during surgery

- **Omentectomy:** The omentum is a layer of fatty tissue that covers the abdominal contents like an apron. Cancer sometimes spreads to this tissue. When this tissue is removed, it is called an *omentectomy*. The omentum is sometimes removed at the same time the hysterectomy is done if cancer has spread there or as a part of [staging](#).
- **Peritoneal biopsies:** The tissue lining the pelvis and abdomen is called the *peritoneum*. Peritoneal biopsies remove small pieces of this lining to check for cancer cells.
- **Pelvic washings:** In this procedure, the surgeon "washes" the abdominal and pelvic cavities with salt water (saline) and sends the fluid to the lab to see if it contains cancer cells.
- **Tumor debulking:** If cancer has spread throughout the abdomen, the surgeon may attempt to remove as much of the tumor as possible. This is called *debulking*. For some types of cancer, debulking can help other treatments (like radiation or chemotherapy) work better. Its role in treating uterine sarcoma is not clear.

Sexual impact of surgery

If you are premenopausal, removing your uterus causes menstrual bleeding (periods) to stop. If your ovaries are also removed, you will go into menopause. This can lead to vaginal dryness and pain during intercourse. These symptoms can be improved with estrogen treatment, but women who have been treated for certain cancers may need to avoid this hormone. Other medicines may be helpful for those women.

While physical and emotional changes can affect the desire for sex, these surgical procedures do not prevent a woman from feeling sexual pleasure. A woman does not need ovaries or a uterus to have sex or reach orgasm. Surgery can actually improve a woman's sex life if the cancer had caused problems with pain or bleeding during sex.

For more information on this topic, see our document [Sexuality for the Woman With Cancer](#).

- [References](#)

[See all references for Uterine Sarcoma](#)

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Radiation Therapy for Uterine Sarcomas

Radiation therapy uses high-energy radiation (such as x-rays) to kill cancer cells. These treatments may be given externally in a procedure that is much like having a diagnostic x-ray. This is called *external beam* radiation therapy.

Radiation therapy also may be given by placing radioactive materials near the tumor. This is called *brachytherapy*. Women treated with this type of radiation do not remain radioactive after the implant is removed. In some situations, both brachytherapy and external beam radiation therapy are given.

When the tumor can be seen growing through the cervix, radiation therapy can be given before surgery to make it easier to completely remove the cancer. Radiation may also be given after surgery to lower the chance of the cancer coming back in the pelvis. This is called *adjuvant radiation*. It may be done for cancers that are high grade or when cancer cells are found in the lymph nodes. In those cases, the entire pelvis may be treated with external beam radiation therapy about 4 to 6 weeks after surgery. Sometimes the radiation field will also include an area of the abdomen called the *para-aortic field*. This is the area in the abdomen around the aorta (the main artery).

Radiation may be done in a woman who can't have surgery because of other health problems.

External beam radiation therapy

External beam radiation therapy is the more familiar type of treatment in which the radiation is delivered from an outside source. This therapy is usually given 5 days a

week for 4 or 5 weeks. The skin covering the area that is exposed to radiation is carefully marked with permanent ink or injected dye, similar to a tattoo. A special mold of the pelvis and lower back is custom-made to ensure that the woman is placed in the exact same position for each treatment. The actual external beam radiation treatment takes less than 30 minutes.

Brachytherapy

Brachytherapy places radioactive materials close to the area to be treated (such as the tumor).

How much of the pelvis needs to be exposed to radiation therapy depends on the extent of the disease. In cases where only the upper third of the vagina (the vaginal cuff) needs to be treated, radioactive material is inserted through the vagina. This is called *vaginal brachytherapy*.

For this treatment, a cylinder with a source of radiation is inserted into the vagina. The length of the cylinder (and the amount of the vagina treated) can vary, but the upper part of the vagina is always treated. With this method, the radiation mainly affects the vagina in the area in contact with the cylinder. Nearby structures such as the bladder and rectum get less radiation exposure.

This procedure is done in the radiation suite of the hospital or care center. About 4 to 6 weeks after the hysterectomy, the surgeon or radiation oncologist inserts a special applicator into the woman's vagina, and pellets of radioactive material are inserted into the applicator. There are 2 types of brachytherapy: low-dose rate (LDR) and high-dose rate (HDR).

In LDR brachytherapy, the radiation sources are usually left in place for between 1 and 4 days at a time. The patient needs to stay immobile to keep the radiation sources from moving during treatment, and so she is usually kept in the hospital on strict bed rest. More than one treatment may be necessary.

In HDR brachytherapy, the radiation is more intense. Each dose takes a very short period of time (usually less than an hour), and the patient can return home the same day. For uterine cancers, HDR brachytherapy is often given weekly or even daily for at least 3 doses.

Side effects of radiation therapy

Short-term [side effects](#) of radiation therapy include:

- Tiredness
- Nausea and vomiting
- Loose stools or diarrhea
- Skin changes
- Low blood counts

Serious fatigue, which may not occur until a few weeks after treatment begins, is a common side effect.

Skin changes are also common, with the skin in the treated area looking and feeling sunburned. As the radiation passes through the skin to its intended target, it may damage the skin cells. This can cause irritation that ranges from temporary and mild redness to permanent discoloration. The skin may release fluid, which can lead to infection, so care must be taken to clean and protect the area exposed to radiation.

As long as a woman is not bleeding heavily from a tumor in her bladder, rectum, uterus, cervix, or vagina, she can still continue to have sex during the course of pelvic radiation therapy. However, the outer genitals and vagina may become sore and tender to touch, and many women choose to stop having intercourse for a while to let the area heal.

Diarrhea is a common side effect, but it can usually be controlled with over-the-counter medicines. Nausea and vomiting may also occur but can be treated with medicines. Side effects tend to be worse when chemotherapy is given with radiation.

Radiation can also lead to low red blood cells (anemia) and low white blood cells (leukopenia). The blood counts usually return to normal after radiation is stopped.

If you are having any side effects from radiation, discuss them with your cancer care team. There are things you can do to get relief from these symptoms or prevent them.

Long-term side effects of radiation

Radiation can also lead to some side effects that can last a long time.

Radiation can irritate the bladder and may cause problems with urination. Bladder irritation, called *radiation cystitis*, can cause discomfort and an urge to urinate frequently.

Radiation therapy may also cause scar tissue to form in the vagina. If the scar tissue makes the vagina shorter or more narrow it is called *vaginal stenosis*. This can make vaginal intercourse painful. A woman can help prevent this problem by stretching the walls of her vagina several times a week. This can be done by having sexual

intercourse 3 to 4 times a week or by using a vaginal dilator (a plastic or rubber tube used to stretch out the vagina). Still, vaginal dryness and pain with intercourse can be long-term side effects from radiation. For more information about dealing with the sexual side effects of radiation, see [Sexuality for the Woman With Cancer](#).

Pelvic radiation can damage the ovaries, resulting in premature menopause. However, most women being treated for uterine sarcoma have already gone through menopause, either naturally or as a result of surgery to treat the cancer.

Radiation to the pelvis can impair fluid drainage from the legs, leading to leg swelling. This is known as *lymphedema* and is more common in women who had lymph nodes removed during surgery. More information about lymphedema can be found in [Lymphedema](#).

Pelvic radiation can also weaken bones, leading to fractures of the hips or pelvic bones. It is important that women who have had pelvic radiation contact their doctor right away if they have pelvic pain. Such pain might be caused by a fracture, recurrent cancer, or other serious conditions.

For more information, see [A Guide to Radiation Therapy](#).

- [References](#)

[See all references for Uterine Sarcoma](#)

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Chemotherapy for Uterine Sarcomas

Chemotherapy (chemo) is the use of drugs to treat cancer. The drugs can be swallowed in pill form or they can be injected by needle into a vein or muscle. Chemotherapy is considered systemic therapy. This means that the drug enters the bloodstream and circulates throughout the body to reach and destroy cancer cells, making this treatment useful for cancer that has spread beyond the uterus. When chemotherapy is given to shrink the cancer before surgery, it is called *neoadjuvant* treatment. If it is given after the cancer has been completely removed with surgery it is called *adjuvant* therapy.

Adjuvant treatments are meant to keep the cancer from coming back later. Chemo can also be used as the main therapy to treat the cancer.

Some of the drugs used to treat uterine sarcomas include:

- Cisplatin
- Dacarbazine (DTIC)
- Docetaxel (Taxotere[®])
- Doxorubicin (Adriamycin[®])
- Liposomal doxorubicin (Doxil[®])
- Epirubicin (Ellence[®])
- Gemcitabine (Gemzar[®])
- Ifosfamide (Ifex[®])
- Paclitaxel (Taxol[®])
- Temozolomide (Temodar[®])
- Trabectedin (Yondelis[®])
- Vinorelbine (Navelbine[®])

Often a combination of drugs is used. For example, gemcitabine and docetaxel are often used together to treat leiomyosarcoma.

These drugs kill cancer cells but can also damage some normal cells. This is what causes many [side effects](#). Side effects of chemotherapy depend on the specific drugs, the amount taken, and the length of time you are treated. Some common side effects include:

- Nausea and vomiting
- Loss of appetite
- Hair loss
- Low blood counts

Chemotherapy can damage the blood-producing cells of the bone marrow, leading to low blood cell counts. This can result in:

- An increased chance of serious [infection](#) (due to a shortage of white blood cells)
- Problems with bleeding or bruising (due to a shortage of blood platelets)
- Feeling tired or short of breath (due to low red blood cell counts)

It is important to let your cancer care team know about any problems you have while on chemo, because many side effects can be prevented or treated. For example, there are many good medicines to prevent or reduce nausea and vomiting. Most side effects of chemotherapy stop when the treatment is over.

However, some side effects from chemotherapy can last a long time. For example, the drug doxorubicin can damage the heart muscle over time. The chance of heart damage goes up as the total dose of the drug goes up, so doctors place a limit on how much doxorubicin can be given. Cisplatin can cause kidney damage. Giving large amounts of fluid before and after chemotherapy can help protect the kidneys. Both cisplatin and paclitaxel can cause [nerve damage](#) (called *neuropathy*). This can lead to numbness, tingling, or even pain in the hands and feet.

For more information on chemotherapy, see [Chemotherapy](#).

- [References](#)

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Hormone Therapy for Uterine Sarcomas

Hormone therapy is the use of hormones or hormone-blocking drugs to fight cancer. It is mainly used to treat patients with endometrial stromal sarcomas and is rarely used for the other types of uterine sarcomas.

Progestins

Progestins are drugs that act like the hormone progesterone. The progestins used most often to treat uterine sarcoma are megestrol (Megace[®]) and medroxyprogesterone (Provera[®]). Side effects can include increased blood sugar levels in patients with diabetes. Hot flashes, night sweats, and weight gain (from fluid retention and an increased appetite) also occur. Rarely, serious blood clots are seen in patients taking progestins.

Gonadotropin-releasing hormone agonists

Gonadotropin-releasing hormone (GNRH) agonists switch off estrogen production by the ovaries. These drugs are useful in lowering estrogen levels in women who are

premenopausal. Examples of GNRH agonists include goserelin (Zoladex[®]) and leuprolide (Lupron[®]). These drugs are injected every 1 to 3 months. Side effects can include any of the symptoms of menopause, such as hot flashes and vaginal dryness. If they are taken for a long time, these drugs can weaken bones, sometimes leading to osteoporosis.

Aromatase inhibitors

After the ovaries are removed, or are not functioning, estrogen is still made in fat tissue. This becomes the body's main source of estrogen. Drugs called *aromatase inhibitors* can stop this estrogen from being formed. Examples of aromatase inhibitors include letrozole (Femara[®]), anastrozole (Arimidex[®]), and exemestane (Aromasin[®]). These drugs are most often used to treat breast cancer, but they also might be helpful in treating endometrial stromal sarcoma. Because they don't affect estrogen production by the ovaries, they are only useful in women whose ovaries have been removed or no longer work (like after menopause). Side effects can include any of the symptoms of menopause, such as hot flashes and vaginal dryness, as well as joint/muscle pain. If they are taken for a long time (years), these drugs can weaken bones, sometimes leading to osteoporosis.

- [References](#)

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Treatment Options for Uterine Sarcoma, by Stage

[Surgery](#) to remove the uterus, fallopian tubes, and ovaries and sample the lymph nodes is the main treatment for uterine sarcomas. Sometimes this is followed by treatment with [radiation](#), [chemotherapy](#) (chemo), or [hormone therapy](#). Treatments given after the cancer has been completely removed with surgery are called *adjuvant treatments*. Adjuvant therapy is given to help keep the cancer from coming back. This approach has helped patients with certain cancers like colon and breast cancer live longer. So far,

though, adjuvant treatments for uterine sarcoma have not helped patients live longer. Since uterine sarcoma is rare, it has been hard to study it well.

Women who can't have surgery because they have other health problems are treated with radiation, chemo, or hormone therapy. Often some combination of these other treatments is used.

Leiomyosarcoma and undifferentiated sarcoma

Stages I and II: Most women have [surgery](#) to remove the uterus, fallopian tubes and ovaries (hysterectomy and bilateral salpingo-oophorectomy). Pelvic and para-aortic lymph node dissection or laparoscopic lymph node sampling may also be done. During surgery, organs near the uterus and the thin membrane that lines the pelvic and abdominal cavities (peritoneum) are carefully examined to determine if the cancer has spread beyond the uterus.

In young women with low-grade leiomyosarcomas (LMS) that have not spread beyond the uterus, the surgeon may—rarely—be able to leave the uterus, fallopian tubes, and ovaries in place, and instead remove only the tumor along with a rim of the normal tissue around it. This approach is not standard treatment, so it is not often offered. It may rarely be a choice for some women who want to still be able to have children after their cancer has been treated. This option has risks, however, so women considering this surgery need to discuss the possible risks and benefits with their gynecologic oncologist before making a decision. It may also be possible to leave a young woman's ovaries in place (but remove the uterus and fallopian tubes), since it isn't clear that this will lead to worse outcomes. Still, this is not a standard treatment, and you should discuss the possible risks and benefits with your doctor. In either case, close follow-up is important, and additional surgery may be needed if the cancer comes back.

After surgery, treatment with [radiation](#) (or sometimes [chemo](#)) may be recommended. This is called *adjuvant treatment* and may lower the chance that the cancer will come back in the pelvis. The goal of surgery is to remove all of the cancer, but the surgeon can only remove what can be seen. Tiny clumps of cancer cells that are too small to be seen can be left behind. Treatments given after surgery are meant to kill those cancer cells so that they don't get the chance to grow into larger tumors.

For LMS of the uterus, adjuvant radiation may lower the chance of the cancer growing back in the pelvis (called *local recurrence*), but it doesn't seem to help women live longer.

Since the cancer can still come back in the lungs or other distant organs, some experts

recommend giving chemo after surgery (adjuvant chemotherapy) for stage II cancers. Chemo is sometimes recommended for stage I LMS as well, but it is less clear that it is really helpful. So far, results from studies of adjuvant chemotherapy have been promising in early stage LMS, but long-term follow-up is still needed to see if this treatment really helps women live longer. Studies of adjuvant therapy are still in progress. For anyone being treated for uterine LMS, entering a clinical trial is always a good option.

Stage III: [Surgery](#) is done to remove all of the cancer. This includes removing the uterus (a hysterectomy), removing both fallopian tubes and ovaries (bilateral salpingo-oophorectomy), and lymph node dissection or sampling. If the tumor has spread to the vagina (stage IIIB), part (or even all) of the vagina will need to be removed as well.

After surgery, treatment with [radiation](#) (with or without [chemo](#)) may be offered to lower the chance that the cancer will come back.

Patients who are too sick (from other medical conditions) to have surgery may be treated with radiation and/or chemo.

Stage IV is divided into stage IVA and stage IVb.

Stage IVA cancers have spread to nearby organs and tissues, such as the bladder or rectum. These cancers may be able to be completely removed with [surgery](#), and this is usually done if possible. If the cancer cannot be removed completely, [radiation](#) may be given, either alone or with [chemo](#).

Stage IVB cancers have spread outside of the pelvis, most often to the lungs, liver, or bone. There is currently no standard treatment for these cancers. [Chemo](#) may be able to shrink the tumors for a time, but is not thought to be able to cure the cancer. [Radiation therapy](#) may also be an option.

Women with stage IV uterine sarcomas might consider taking part in [clinical trials](#) (scientific studies of promising treatments) testing new chemo or other treatments.

Endometrial stromal sarcoma

Stages I and II: Early stage endometrial stromal sarcoma is treated with [surgery](#): hysterectomy and bilateral salpingo-oophorectomy (removal of the uterus, both fallopian tubes and both ovaries). Some young women may be given the option of keeping their ovaries, but this is not the standard treatment. Pelvic lymph nodes may be removed as well. After surgery, some women do not get further treatment. These women are

watched closely for signs that the cancer has returned. Others may be treated with [hormone therapy](#) and sometimes [radiation](#) to the pelvis. These can lower the chances of the cancer coming back, but they have not been shown to help patients live longer.

Patients who are too sick (from other medical conditions) to have surgery may be treated with radiation and/or hormone therapy.

Stage III: [Surgery](#) is done to remove all of the cancer. This includes removing the uterus (a hysterectomy), removing both fallopian tubes and ovaries (bilateral salpingo-oophorectomy), and lymph node dissection or sampling. If the tumor has spread to the vagina (stage IIIB), part (or even all) of the vagina will need to be removed as well. Treatment after surgery depends on the type of sarcoma.

Women with endometrial stromal sarcomas might receive [radiation](#), [hormone therapy](#), or both after surgery.

Patients who are too sick (from other medical conditions) to have surgery may be treated with radiation, [chemo](#), and/or hormone therapy.

Stage IV is divided into stage IVA and stage IVb.

Stage IVA cancers have spread to nearby organs and tissues, such as the bladder or rectum. These cancers may be able to be completely removed with surgery, and this is usually done if possible. If the cancer cannot be removed completely, radiation may be given, either alone or with chemo. [Hormone therapy](#) is also an option.

Stage IVB cancers have spread outside of the pelvis, most often to the lungs, liver, or bone. Hormone therapy can help for a time. [Chemo](#) and [radiation](#) are also options.

Women with stage IV uterine sarcomas might consider taking part in [clinical trials](#) (scientific studies of promising treatments) testing new chemo or other treatments.

Recurrent uterine sarcoma

If a cancer comes back after treatment, it is called *recurrent*. If the cancer comes back in the same area as it was in the first place, it is called a *local recurrence*. For uterine sarcoma, the cancer growing back as a tumor in the pelvis would be a local recurrence. If it comes back in another area like the liver or lungs, it is called a *distant recurrence*.

Unfortunately, uterine sarcoma often comes back in the first few years after treatment. Treatment options are the same as those for stage IV. If the cancer can be removed,

[surgery](#) may be done. [Radiation](#) may be used to reduce the size of the tumor and relieve the symptoms of large pelvic tumors. Sarcoma often comes back as spread to the lungs. If there are only 1 or 2 small tumors, these may be able to be removed with surgery. Some patients have been cured by this treatment.

- [References](#)

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