

# cancer.org | 1.800.227.2345

one type of treatment. Doctors on your cancer treatment team may include:

- A gynecologist: a doctor who specializes in diseases of the female reproductive tract
- A gynecologic oncologist: a doctor who specializes in treating cancers of the female reproductive system (including surgery and chemotherapy)
- A radiation oncologist: a doctor who uses radiation to treat cancer
- A medical oncologist: a doctor who uses chemotherapy and other medicines to treat cancer

Many other specialists may be involved in your care as well, including nurses, nurse practitioners, social workers, psychologists, rehabilitation specialists, and other health professionals.

Health Professionals Who Are Part of a Cancer Care Team

#### **Making treatment decisions**

It's important to talk with your family and treatment team about all of your treatment options, as well as their possible side effects, so you make the choice that best fits your needs. If there's anything you don't understand, ask to have it explained.

If time permits, it's often a good idea to seek a second opinion. A second opinion can give you more information and help you feel more sure of the treatment plan you choose.

- Questions to Ask About Endometrial Cancer
- Seeking a Second Opinion

#### 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.

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.

#### Clinical Trials

### Considering complementary and alternative methods

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

**Complementary** methods are treatments that are used **along with** your regular medical care. **Alternative** treatments are used **instead of** standard 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 harmful.

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.

Complementary and Integrative Medicine

#### Help getting through cancer treatment

People with cancer need support and information, no matter what stage of illness they may be in. Knowing all of your options and finding the resources you need will help you make informed decisions about your care.

Whether you are thinking about treatment, getting treatment, or not being treated at all, you can still get supportive care to help with pain or other symptoms. Communicating with your cancer care team is important so you understand your diagnosis, what treatment is recommended, and ways to maintain or improve your quality of life.

Different types of programs and support services may be helpful, and they can be 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, and more - to help you get through treatment. Call our Cancer Knowledge Hub at 1-800-227-2345 and speak with one of our caring, trained cancer helpline specialists. Or, if you prefer, you can use our chat feature on cancer.org to connect with one of our specialists.

- Palliative Care
- Programs & Services

#### Choosing to stop treatment or choosing no treatment at all

For some people, when treatments have been tried and are no longer controlling the cancer, it could be time to weigh the benefits and risks of continuing to try new treatments. Whether or not you continue treatment, there are still things you can do to help maintain or improve your quality of life.

Some people, especially if the cancer is advanced, might not want to be treated at all. There are many reasons you might decide not to get cancer treatment, but it's important to talk to your doctors as you make that decision. Remember that even if you choose not to treat the cancer, you can still get supportive care to help with pain or other symptoms.

• If Cancer Treatments Stop Working

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 your cancer care team any questions you may have about your treatment options.

# **Surgery for Endometrial Cancer**

- Hysterectomy
- Bilateral salpingo-oophorectomy
- Lymph node surgery
- Pelvic washings (peritoneal lavage)
- Other procedures that might be used to look for cancer spread
- Tumor debulking
- Recovery after surgery
- Side effects of surgery

#### More information about Surgery

Surgery is often the main treatment for endometrial cancer and consists of a hysterectomy, often along with a salpingo-oophorectomy, and removal of lymph nodes. In some cases, pelvic washings are done, the omentum is removed, and/or peritoneal biopsies are done. If the cancer has spread throughout the pelvis and abdomen (belly), a debulking procedure (removing as much cancer as possible) may be done. These are discussed in detail below.

## Hysterectomy

#### Types of hysterectomy

The main treatment for endometrial cancer is surgery to take out the uterus and cervix. This operation is called a hysterectomy. When the uterus is removed through an incision (cut) in the abdomen (belly), it's called a **simple or total abdominal hysterectomy**.

If the uterus is removed through the vagina, it's known as a **vaginal hysterectomy**. This may be an option for women who are not healthy enough for other types of surgery.

When endometrial cancer has spread to the cervix or the area around the cervix (called the *parametrium*), a **radical hysterectomy** is done. In this operation, the entire uterus, the tissues next to the uterus (parametrium and uterosacral ligaments), and the upper part of the vagina (next to the cervix) are all removed. This operation is most often done through the abdomen, but it can also be done through the vagina.

### Surgeries done along with hysterectomy

It's rare to remove the uterus but not the ovaries when treating endometrial cancer. (Still, it might be done in certain cases for women who are premenopausal.) Removing the ovaries and fallopian tubes is called a **bilateral salpingo-oophorectomy (BSO)**. It isn't really part of a hysterectomy. It's a separate procedure that's done during the same operation. (See the Bilateral salpingo-oophorectomy section below.)

To decide what <u>stage</u><sup>1</sup> the cancer is in, lymph nodes in the pelvis and around the aorta also need to be removed. This is called **lymph node dissection**. It can be done through the same incision as the abdominal hysterectomy. If the hysterectomy is done vaginally, lymph nodes can be removed with laparoscopic surgery. (See "Lymph node

surgery" below.)

# How is hysterectomy done?

As mentioned above, this surgery can be done through a large cut in the belly (abdomen). It can also be done through the vagina. **Laparoscopic surgery** or minimally invasive surgery is another option that's becoming more common.

<u>Laparoscopy</u><sup>2</sup> is a technique that lets the surgeon look at the inside of the abdomen and

# Lymph node surgery

**Pelvic and para-aortic lymph node dissection** is an operation done to remove lymph nodes from the pelvis and the area next to the aorta. The nodes are tested to see if they contain cancer cells that have spread from the endometrial tumor. This information is part of finding the surgical stage of the cancer.

The surgery is called a **lymph node dissection** when most or all of the lymph nodes in the area are removed. This is usually done at the same time as the operation to remove the uterus (hysterectomy). If you're having an abdominal hysterectomy, the lymph nodes can be removed through the same incision. In women who have had a vaginal hysterectomy, lymph nodes may be removed by <u>laparoscopic surgery</u><sup>3</sup>.

When only a few of the lymph nodes in an area are removed, it's called **lymph node sampling**.

menopause right away. This can lead to symptoms like hot flashes, night sweats, and vaginal dryness. Long-term, it can lead to osteoporosis and increased risk for heart

Angeles MA, Martínez-Gómez C, Migliorelli F, et al. Novel Surgical Strategies in the Treatment of Gynecological Malignancies. *Curr Treat Options Oncol.* 2018;19(12):73.

Burton ER, Sorosky JI. Recognition and Therapeutic Options for Malignancy of the Cervix and Uterus. *Obstet Gynecol Clin North Am.* 2017;44(2):195-206.

Casarin J, Multinu F, Ubl D, et al. Adoption of Minimally Invasive Surgery and Decrease in Surgical Morbidity for Endometrial Cancer Treatment in the United States. *Obstet Gynecol.* 2018;131(2):304–311.

National Comprehensive Cancer Network, Clinical Practice Guidelines in Oncology (NCCN Guidelines®), Uterine Neoplasms, Version 1.2019 -- October 17, 2018. Accessed at www.nccn.org/professionals/physician\_gls/pdf/uterine.pdf on February 8, 2019.

Polan RM, Rossi EC, Barber EL. Extent of lymphadenectomy and postoperative major complications among women with endometrial cancer treated with minimally invasive surgery. *Am J Obstet Gynecol.* 2018 Dec 3.

Rodriguez EF, Monaco SE, Khalbuss W, Marshall Austin R, Pantanowitz L. Abdominopelvic washings: A comprehensive review. *CytoJournal*. 2013;10:7.

Tanaka T, Terai Y, Fujiwara S, et al. The detection of sentinel lymph nodes in laparoscopic surgery can eliminate systemic lymphadenectomy for patients with early stage endometrial cancer. *Int J Clin Oncol.* 2018;23:305–313.

Volpi L, Sozzi G, Capozzi VA, et al. Long term complications following pelvic and paraaortic lymphadenectomy for endometrial cancer, incidence and potential risk factors: a single institution experience. *Int J Gynecol Cancer*. 2019;29(2):312-319.

See all references for Endometrial Cancer

Last Revised: March 27, 2019

# Radiation Therapy for Endometrial Cancer

- Brachytherapy
- External beam radiation therapy
- Side effects of radiation therapy
- More information about radiation therapy

Radiation therapy uses high-energy radiation (like x-rays) to kill cancer cells. It can be given in 2 ways to treat endometrial cancer:

- By putting radioactive materials inside the body. This is called internal radiation therapy or brachytherapy.
- By using a machine that focuses beams of radiation at the tumor, much like having an x-ray. This is called **external beam radiation therapy**.

In some cases, both brachytherapy and external beam radiation therapy are used. When that's done, the external beam radiation is usually given first, followed by the brachytherapy. The <a href="stage">stage</a>¹ and grade of the cancer are used to help decide what areas need to be treated with radiation therapy and which types of radiation are used.

Radiation is most often used after surgery to treat endometrial cancer. It can kill any cancer cells that may still be in the treated area. If your treatment plan includes radiation after surgery, you will be given time to heal before starting radiation. Often, at least 4 to 6 weeks are needed.

Less often, radiation might be given before surgery to help shrink a tumor so it's easier to remove.

Women who are not healthy enough for surgery may get radiation as their main treatment.

# **Brachytherapy**

Women who have had their uterus (and cervix) removed may have the upper part of the vagina treated with brachytherapy. This is called **vaginal brachytherapy**. A source of radiation (a radioactive material) is put into a cylinder (called an applicator) and the cylinder is put into the vagina. (It feels a lot like a snug tampon.) The size of the cylinder

#### Short-term side effects

Common side effects of radiation therapy include tiredness, upset stomach, or loose stools. Severe fatigue, which may not start until about 2 weeks after treatment begins, is also common. Diarrhea is common, but usually can be controlled with over-the-counter medicines. Nausea and vomiting may occur, but can be treated with medicine. These side effects are more common with external beam radiation than with brachytherapy.

Side effects tend to be worse when chemotherapy is given with radiation.

**Skin changes**, which can range from mild redness to peeling and blistering, are quite common. The skin may release fluid, which can lead to infection, so care must be taken to clean and protect the area exposed to radiation. Sometimes, as it heals, the skin in the treated area becomes darker or less flexible (harder).

Radiation can irritate the bladder, and you might have problems urinating. Irritation to the bladder, called **radiation cystitis**, can result in discomfort, blood in the urine, and an urge to urinate often.

Radiation can also cause irritation in the intestine. Rectal irritation or bleeding is called **radiation proctitis**. It's sometimes treated with enemas that contain a steroid (like hydrocortisone) or suppositories that contain an anti-inflammatory.

Radiation can irritate the vagina, leading to discomfort and drainage (a discharge). This is called **radiation vaginitis**. If it occurs, the doctor may recommend douching with a dilute solution of hydrogen peroxide. When the irritation is severe, open sores can develop in the vagina, which may need to be treated with an estrogen cream.

Radiation can also lead to **low blood counts**, causing anemia (low red blood cells) and leukopenia (low white blood cells). The blood counts usually return to normal within a few weeks after radiation is stopped.

#### Long-term side effects

Radiation therapy may cause changes to the lining of the vagina leading to vaginal dryness. This is more common after vaginal brachytherapy than after pelvic radiation therapy. In some cases scar tissue can form in the vagina. The scar tissue can make the vagina shorter or more narrow (called **vaginal stenosis**), which can make sex (vaginal penetration) 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 sex 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 sex can be long-term side effects of

radiation. Some centers have physical therapists who specialize in pelvic floor therapy which can help to treat these vaginal symptoms and sometimes improve sexual function. Ask your doctor about this if you are bothered by these problems. You can also find some helpful information in Sex and the Woman With Cancer<sup>2</sup>.

Pelvic radiation can damage the ovaries, resulting in **premature menopause**. This is not an issue for most women treated for endometrial cancer because they have already gone through menopause, either naturally or as a result of surgery to treat the cancer (hysterectomy and removal of the ovaries).

Pelvic radiation therapy can also lead to blockages that keep fluid from draining out of the leg. This can lead to severe swelling, called **lymphedema**. Lymphedema is a long-term side effect; it doesn't go away after radiation is stopped. In fact it may not start for several months or even years after treatment ends. This side effect is more common if pelvic lymph nodes were removed during surgery to remove the cancer. There are specialized physical therapists who can help treat this. It's important to start treatment right away if you develop it. To learn more, see <u>Lymphedema</u><sup>3</sup>.

Radiation to the pelvis can **weaken the bones**, leading to fractures of the hips or pelvic bones. It's important that women who have had endometrial cancer contact their doctor right away if they have pelvic pain. Such pain might be caused by a fracture, recurrent cancer (cancer that's come back after treatment), or other serious conditions.

Pelvic radiation can also lead to long-term problems with the bladder (radiation cystitis) or bowel (radiation proctitis). Rarely, radiation damage to the bowel can cause a **blockage** (called *obstruction*) or for an abnormal connection to form between the bowel and the vagina or outside skin (called a *fistula*). These conditions may need to be treated with surgery.

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

More information about radiation therapy If you o 0 0eay0 rg ( )Tj 0 g 0 0 0(More i

# **Hyperlinks**

- 1. <u>www.cancer.org/cancer/types/endometrial-cancer/detection-diagnosis-staging/staging.html</u>
- 2. <u>www.cancer.org/cancer/managing-cancer/side-effects/fertility-and-sexual-side-effects/sexuality-for-women-with-cancer.html</u>
- 3. www.cancer.org/cancer/managing-cancer/side-effects/swelling/lymphedema.html
- 4. www.cancer.org/cancer/managing-cancer/treatment-types/radiation.html
- 5. www.cancer.org/cancer/managing-cancer/side-effects.html
- 6. www.cancer.org/cancer/types/endometrial-cancer/references.html

#### References

American Society for Radiation Oncology. RT Answers - Answers to Your Radiation Therapy Questions. Brachytherapy. Accessed at www.rtanswers.org/How-does-radiation-therapy-work/Brachytherapy on February 8, 2019.

American Society of Clinical Oncology. Uterine Cancer: Treatment Options. 6/2017. Accessed at www.cancer.net/cancer-types/uterine-cancer/treatment-options on February 8, 2019.

National Cancer Institute. Endometrial Cancer Treatment (PDQ®)—Patient Version. April 26, 2018. Accessed at www.cancer.gov/types/uterine/patient/endometrial-treatment-pdq on February 8, 2019.

National Cancer Institute. *Radiation Therapy and You: Support for People with Cancer.* October 2016. Accessed at www.cancer.gov/publications/patient-education/radiationttherapy.pdf on February 8, 2019.

National Comprehensive Cancer Network, Clinical Practice Guidelines in Oncology (NCCN Guidelines®), Uterine Neoplasms, Version 1.2019 -- October 17, 2018. Accessed at www.nccn.org/professionals/physician\_gls/pdf/uterine.pdf on February 8, 2019.

Radiologyinfo.org. Brachytherapy. May 8, 2017. Accessed at www.radiologyinfo.org/en/info.cfm?pg=brachy on February 8, 2019.

See all references for Endometrial Cancer

Last Revised: March 27, 2019

# **Chemotherapy for Endometrial Cancer**

**hemorrhagic cystitis**). To prevent this, you might be given large amounts of IV fluids and a drug called mesna along with the chemo.

Before starting chemotherapy, be sure to discuss the drugs and their possible side effects with your health care team.

If you have side effects while on chemotherapy, remember that there are ways to prevent or treat most of them. For instance, there are many anti-nausea drugs that can help prevent or reduce nausea and vomiting. Be sure to tell your health care team about any side effects you have. Treating them right away can often keep them from getting worse.

## More information about chemotherapy

For more general information about how chemotherapy is used to treat cancer, see Chemotherapy<sup>2</sup>.

To learn about some of the side effects listed here and how to manage them, see Managing Cancer-related Side Effects<sup>3</sup>.

# **Hyperlinks**

- 1. <u>www.cancer.org/cancer/types/breast-cancer/understanding-a-breast-cancer-diagnosis/breast-cancer-her2-status.html</u>
- 2. www.cancer.org/cancer/managing-cancer/treatment-types/chemotherapy.html
- 3. www.cancer.org/cancer/managing-cancer/side-effects.html
- 4. <u>www.cancer.org/cancer/types/endometrial-cancer/references.html</u>

#### References

American Society of Clinical Oncology. Uterine Cancer: Treatment Options. 6/2017. Accessed at www.cancer.net/cancer-types/uterine-cancer/treatment-options on February 8, 2019.

Cowan M, Strauss JB, Barber EL, Matei D. Updates on adjuvant chemotherapy and radiation therapy for endometrial cancer. *Curr Opin Obstet Gynecol*. 2019;31(1):31-37.

National Cancer Institute. Endometrial Cancer Treatment (PDQ®)—Health Professional Version. January 19, 2018. Accessed at www.cancer.gov/types/uterine/hp/endometrial-

At this time, no one type of hormone treatment has been found to be the best for endometrial cancer.

# **Progestins**

The main hormone treatment for endometrial cancer uses progesterone or drugs like it (called **progestins**). The 2 most commonly used progestins are:

- Medroxyprogesterone acetate (Provera<sup>®</sup>), which can be given as an injection or as a pill
- Megestrol acetate (Megace®), which is given as a pill or liquid

These drugs slow the growth of endometrial cancer cells. They've been found to be useful in treating women with endometrial cancer who want to be able to get pregnant in the future, and this is an area of research interest.

#### Side effects can include:

Hot flashes
Night sweats

boosting the growth of the cancer cells. Though tamoxifen may keep estrogen from "feeding" the cancer cells, it acts like a weak estrogen in other parts of the body. It doesn't cause bone loss, but it can cause hot flashes and vaginal dryness. Women taking tamoxifen also are at higher risk for serious blood clots in the legs.

## Luteinizing hormone-releasing hormone agonists

Most women with endometrial cancer have had their ovaries removed as a part of treatment. Some women might have had radiation treatments that made their ovaries inactive. This helps keep the body from making estrogen and may also slow the growth of the cancer.

Luteinizing hormone-releasing hormone agonists (LHRH agonists) are drugs that lower estrogen levels in women who still have working ovaries. These drugs "turn off" the ovaries in women who are premenopausal so they don't make estrogen.

Goserelin (Zoladex®) and

To learn more about how hormone therapy is used to treat cancer, see <u>Hormone</u> Therapy<sup>2</sup>.

To learn about some of the side effects listed here and how to manage them, see <u>Managing Cancer-related Side Effects</u><sup>3</sup>.

# **Hyperlinks**

- 1. <u>www.cancer.org/cancer/risk-prevention/medical-treatments/menopausal-hormone-replacement-therapy-and-cancer-risk.html</u>
- 2. www.cancer.org/cancer/managing-cancer/treatment-types/hormone-therapy.html
- 3. www.cancer.org/cancer/managing-cancer/side-effects.html
- 4. <u>www.cancer.org/cancer/types/endometrial-cancer/references.html</u>

#### References

Bogliolo S, Gardella B, Dominoni M, et al. Effectiveness of aromatase inhibitors in the treatment of advanced endometrial adenocarcinoma. *Arch Gynecol Obstet.* 2016;293(4):701-708.

de Haydu C, Black JD, Schwab CL, English DP, Santin AD. An update on the current pharmacotherapy for endometrial cancer. *Expert Opin Pharmacother*. 2016;17(4):489-499.

Ethier JL, Desautels DN, Amir E, MacKay H. Is hormonal therapy effective in advanced endometrial cancer? A systematic review and meta-analysis. *Gynecol Oncol.* 2017;147(1):158-166.

Jerzak KJ, Duska L, MacKay HJ. Endocrine therapy in endometrial cancer: An old dog with new tricks. *Gynecol Oncol* 

Accessed at www.nccn.org/professionals/physician\_gls/pdf/uterine.pdf on February 13, 2019.

National Cancer Institute. Endometrial Cancer Treatment (PDQ®)—Health Professional Version. January 19, 2018. Accessed at www.cancer.gov/types/uterine/hp/endometrial-treatment-pdg/ on February 13, 2019.

See all references for Endometrial Cancer

Last Revised: March 27, 2019

# Targeted Therapy for Endometrial Cancer

- Lenvatinib
- Bevacizumab
- mTOR inhibitors
- More information about targeted therapy

Targeted therapy is treatment with drugs that are made to target certain changes in the cancer cells. Targeted therapy drugs work differently from standard chemotherapy (chemo) drugs. They tend to have different (and sometimes less severe) side effects than chemo.

Targeted therapy is used to treat many types of cancer, but it's still fairly new in the treatment of endometrial cancer. Only a few of these drugs are in use at this time. Some of these are only given as part of a <u>clinical trial</u><sup>1</sup>, but many more are being studied. These drugs are mostly used to treat high-risk endometrial cancers and those that have spread (metastasized) or come back (recurred) after treatment.

#### Lenvatinib

#### Everolimus (Afinitor) is taken as a pill once a day.

Common side effects include mouth sores, diarrhea, nausea, feeling weak or tired, shortness of breath, and cough. Everolimus can also cause low blood counts, increase blood lipids (cholesterol and triglycerides), and raise your blood sugar, so your doctor will check your blood work often while you are taking this drug.

**Temsirolimus (Torisel)** is given as an intravenous (IV) infusion, typically once a week. It can be given alone.

The most common side effects of this drug are skin rash, weakness, mouth sores, diarrhea, nausea, loss of appetite, fluid build-up in the face or legs, and increases in blood sugar and cholesterol levels. Rarely, more serious side effects have been reported.

# More information about targeted therapy

To learn more about how targeted drugs are used to treat cancer, see <u>Targeted Cancer</u> <u>Therapy</u><sup>2</sup>.

To learn about some of the side effects listed here and how to manage them, see Managing Cancer-related Side Effects<sup>3</sup>.

Нуре	erlinks				

Kassem L, Abdel-Rahman O. Targeting mTOR pathway in gynecological malignancies: Biological rationale and systematic review of published data. *Crit Rev Oncol Hematol.* 2016;108:1-12.

McDonald ME, Bender DP. Endometrial Cancer: Obesity, Genetics, and Targeted Agents. *Obstet Gynecol Clin North Am.* 2019;46(1):89-105.

National Cancer Institute. Endometrial Cancer Treatment (PDQ®)—Patient Version. April 26, 2018. Accessed at www.cancer.gov/types/uterine/patient/endometrial-treatment-pdq

# **Immunotherapy for Endometrial Cancer**

used to treat some endometrial cancers.

#### **PD-1** inhibitors

**Pembrolizumab (Keytruda)** and **dostarlimab (Jemperli)** are drugs that target PD-1, a protein on immune system cells called T cells. PD-1 normally helps keep T cells from attacking other cells in the body (including some cancer cells). By blocking PD-1, these drugs boost the immune response against cancer cells. This can shrink some tumors or slow their growth.

**Pembrolizumab** can be used by itself to treat advanced endometrial cancers, typically after other treatments have been tried, if surgery or radiation are not good options, and if the cancer cells have any of the following:

- A high level of microsatellite instability (MSI-H) or a defect in a mismatch repair gene (dMMR)
- A **high tumor mutational burden (TMB-H)**, meaning the cells have many gene mutations

Tumor cells can be tested for these changes.

#### Possible side effects

Side effects of these drugs can include:

- Feeling tired or weak
- Fever
- Cough
- Nausea
- Itching
- Skin rash
- · Loss of appetite
- Muscle or joint pain
- Shortness of breath
- Constipation or diarrhea

Other, more serious side effects occur less often. These can include:

**Infusion reactions:** Some people might have an infusion reaction while getting one of these drugs. This is like an allergic reaction, and can include fever, chills, flushing of the face, rash, itchy skin, feeling dizzy, wheezing, and trouble breathing. It's important to tell your doctor or nurse right away if you have any of these symptoms while getting one of these drugs.

Autoimmune reactions: These drugs work by basically removing one of the

## **Hyperlinks**

- 1. <a href="https://www.cancer.org/cancer/managing-cancer/treatment-types/immunotherapy.html">www.cancer.org/cancer/managing-cancer/treatment-types/immunotherapy.html</a>
- 2. www.cancer.org/cancer/managing-cancer/side-effects.html

#### References

Arora E, Masab M, Mittar P, et al. Role of Immune Checkpoint Inhibitors in Advanced or Recurrent Endometrial Cancer. *Cureus*. 2018;10(4):e2521.

McDonald ME, Bender DP. Endometrial Cancer: Obesity, Genetics, and Targeted Agents. *Obstet Gynecol Clin North Am.* 2019;46(1):89-105.

Mitamura T, Dong P, Ihira K, Kudo M, Watari H. Molecular-targeted therapies and precision medicine for endometrial cancer. *Jpn J Clin Oncol.* 2019;49(2):108-120.

National Cancer Institute. Endometrial Cancer Treatment (PDQ®)—Health Professional Version. January 19, 2018. Accessed at www.cancer.gov/types/uterine/hp/endometrial-treatment-pdq/ on February 22, 2019.

Last Revised: August 3, 2023

# Treatment Choices for Endometrial Cancer, by Stage

- Stage I cancers
- Stage II cancers
- Stage III cancers
- Stage IV cancers
- Recurrent endometrial cancer

The stage (extent) of endometrial cancer is the most important factor in choosing treatment. But other factors can also affect your treatment options, including the type of cancer, your age and overall health, and whether you want to be able to have children. Tests done on the cancer cells are also used to find out if certain treatments, like hormone and targeted therapy, might work.

Surgery is the first treatment for almost all women with endometrial cancer. The operation includes removing the uterus, fallopian tubes, and ovaries. (This is called a total hysterectomy bilateral salpingo-oophorectomy or TH/BSO). Lymph nodes from the pelvis and around the aorta may also be removed (a pelvic and para-aortic lymph node dissection [LND] or sampling) and tested for cancer spread. Pelvic washings may be done, too. The tissues removed at surgery are tested 5sdwi tr

due to age are often treated with just radiation (external radiation and/or vaginal brachytherapy).

Fertility-sparing treatment for stage IA grade 1 endometrioid cancers: For young women who still want to have children, surgery may be postponed while progestin therapy is used to treat the cancer. Progestin treatment can cause the cancer to shrink or even go away for some time, giving the woman a chance to get pregnant. Still, this is experimental and can be risky if the patient isn't watched closely. An endometrial biopsy or a D&C should be done every 3 to 6 months. If there's still no cancer after 6 months, the woman can try to become pregnant. She will continue to be checked for cancer every 6 months. Because the cancer often comes back again, doctors recommend TH/BSO after childbearing is complete.

Many times, progestin treatment doesn't work and the cancer doesn't get better or keeps growing. Putting off surgery can give the cancer time to spread outside the uterus. If it doesn't go away in 6 to 12 months, surgery to remove and stage the cancer is recommended (hysterectomy and removal of both fallopian tubes and ovaries).

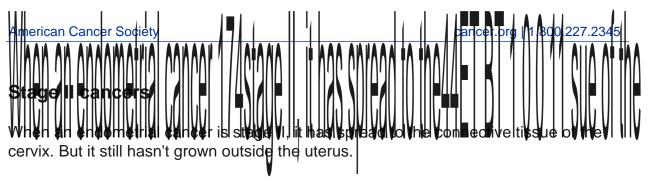
A second opinion from a gynecologic oncologist and pathologist (to confirm the grade of the cancer) before starting progestin therapy is important. Seeing a fertility expert is also a good idea. It's important to understand that this isn't a standard treatment and may increase risk of cancer growth and spread.

#### Other types of stage I endometrial cancers

Cancers such as papillary serous carcinoma, clear cell carcinoma, or carcinosarcoma are more likely to have already spread outside the uterus when diagnosed. Women with these types of tumors don't do as well as those with lower grade tumors. If the biopsy done before surgery shows a high-grade cancer, the surgery may be more extensive. Along with the total hysterectomy and removal of both fallopian tubes and ovaries, the pelvic and para-aortic lymph node will be removed, and the omentum is often removed, too.

After surgery, chemotherapy (chemo) with or without radiation therapy are given to help keep the cancer from coming back. The chemo usually includes the drugs carboplatin and paclitaxel, but other drugs can also be used.

If the cancer can't be removed with surgery, both chemotherapy (chemo) with or without and radiation are used. Sometimes, the tumor then shrinks so that surgery can then be done to remove it.



(B) Septemble of the interior of the vagina are removed), removal of both fallopian tubes and ovaries (BSO), adverg /GS1322 gs ((BSqtcnkara-aort(BSlymph f 0 0 0 rg /GS1310 gs 96 df 0 so 72 gs (LND/6)).

be done. Pelvic washings will be done and the omentum may be removed. Some doctors will try to remove any remaining cancer (called debulking), but it isn't clear that this helps patients live longer.

If <u>tests done before surgery</u><sup>3</sup> show that the cancer has spread too far to be removed completely, in rare cases, radiation therapy may be given before any surgery. It might shrink the tumor enough to make <u>surgery</u> an option. For advanced endometrial cancers that cannot be treated with surgery or radiation, treatment with the

or para-aortic area. This stage also includes cancers that have spread to the liver, lungs, omentum, or other organs.

Some endometrial cancers are stage IV because they have spread to lymph nodes in the abdomen (and not just the pelvis and para-aortic area), but they haven't spread to any other areas. Women with this kind of cancer spread may have better outcomes if all the cancer that's seen can be removed (debulked) and biopsies of other areas in the abdomen do not show cancer cells.

In most cases of stage IV endometrial cancer, the cancer has spread too far for it all to be removed with surgery. A hysterectomy and removal of both fallopian tubes and ovaries may still be done to prevent excessive bleeding. Radiation therapy may also be used for this reason. When the cancer has spread to other parts of the body, hormone therapy may be used. But high-grade cancers and those without detectable progesterone and estrogen receptors on the cancer cells are not likely to respond to hormone therapy.

Combinations of chemo drugs may help some women for a time. The drugs used most often are paclitaxel, doxorubicin, and either carboplatin or cisplatin. These drugs are often used together in combination. Stage IV carcinosarcoma is often treated with much the same chemo. Cisplatin, ifosfamide, and paclitaxel may also be combined.

Targeted drugs and/or immunotherapy drugs may also be options for some women with advanced endometrial cancer.

Women with stage IV endometrial cancer should consider taking part in <u>clinical trials</u><sup>4</sup> of chemotherapy or other new treatments.

#### Recurrent endometrial cancer

Cancer is called recurrent when it come backs after treatment. Recurrence can be local (in or near the same place it started) or distant (spread to organs such as the lungs or bone). Treatment depends on the amount of cancer and where it is, as well as the kind of treatment that was used the first time.

For local recurrences, such as in the pelvis, <u>surgery</u> (sometimes followed with <u>radiation</u> therapy) is used. For women who have other medical conditions that make them unable to have surgery, radiation therapy alone or combined with <u>hormone therapy</u> tends to be used.

For a distant recurrence, surgery and/or focused radiation therapy may be used when

the cancer is only in a few small spots (like in the lungs or bones). Women with more extensive recurrences (widespread cancer) are treated like those with stage IV endometrial cancer. Either hormone therapy or chemo is recommended. Low-grade cancers containing progesterone receptors are more likely to respond well to hormone therapy. Higher-grade cancers and those without detectable receptors are unlikely to shrink during hormone therapy but may respond to chemo. Targeted therapy and immunotherapy may be used in some cases. Clinical trials<sup>5</sup> of new treatments are another good option.

# **Hyperlinks**

- 1. <a href="www.cancer.org/cancer/types/endometrial-cancer/detection-diagnosis-staging/staging.html">www.cancer.org/cancer/types/endometrial-cancer/detection-diagnosis-staging/staging.html</a>
- 2. <u>www.cancer.org/cancer/types/endometrial-cancer/detection-diagnosis-staging/staging.html</u>
- 3. <u>www.cancer.org/cancer/types/endometrial-cancer/detection-diagnosis-staging/how-diagnosed.html</u>
- 4. <u>www.cancer.org/cancer/managing-cancer/making-treatment-decisions/clinical-trials.html</u>
- 5. <u>www.cancer.org/cancer/managing-cancer/making-treatment-decisions/clinical-trials.html</u>
- 6. <u>www.cancer.org/cancer/types/endometrial-cancer/references.html</u>

#### References

National Cancer Institute. Endometrial Cancer Treatment (PDQ®)—Health Professional Version. January 19, 2018. Accessed at www.cancer.gov/types/uterine/hp/endometrial-