Treating Basal and Squamous Cell Skin Cancer

If you’ve been diagnosed with basal or squamous cell skin cancer, your treatment team will discuss your options with you. It’s important to weigh the benefits of each treatment option against the possible risks and side effects.

How are basal and squamous cell skin cancers treated?

Based on the type and stage of the cancer and other factors, your treatment options may include:

- Surgery for Basal and Squamous Cell Skin Cancers
- Local Treatments Other than Surgery for Basal and Squamous Cell Skin Cancers
- Radiation Therapy for Basal and Squamous Cell Skin Cancers
- Systemic Chemotherapy for Basal and Squamous Cell Skin Cancers
- Targeted Therapy for Basal and Squamous Cell Skin Cancers
- Immunotherapy for Basal and Squamous Cell Skin Cancers

Common treatment approaches

Different approaches might be used to treat basal cell carcinoma, squamous cell carcinoma, actinic keratosis, and Bowen disease. Fortunately, most of these cancers and pre-cancers can be cured with fairly minor surgery or other types of local treatments.

(Other skin cancers, such as melanoma¹, lymphoma of the skin², Merkel cell carcinoma³, Kaposi sarcoma⁴, and other sarcomas⁵ are treated differently and are covered elsewhere.)
• **Treating Basal Cell Carcinoma**
• **Treating Squamous Cell Carcinoma of the Skin**
• **Treating Actinic Keratosis and Bowen Disease**

**Who treats basal and squamous cell skin cancers?**

You might have different types of doctors on your treatment team. Most basal and squamous cell cancers (as well as pre-cancers) are treated by **dermatologists** – doctors who specialize in treating skin diseases.

If the cancer is more advanced, you may be treated by another type of doctor, such as:

- A **surgical oncologist**: a doctor who treats cancer with surgery
- A **medical oncologist**: a doctor who treats cancer with chemotherapy or other medicines
- A **radiation oncologist**: A doctor who treats cancer with radiation therapy

You might have many other specialists on your treatment team as well, including physician assistants, nurse practitioners, nurses, nutrition specialists, social workers, and other health professionals.

- [Health Professionals Associated With Cancer Care](#)

**Making treatment decisions**

It’s important to discuss all of your treatment options, including their goals and possible side effects, with your doctors to help make the decision that best fits your needs. Some important things to consider include:

- The type and location of your skin cancer
- The likelihood that treatment will cure your cancer (or help in some other way)
- Your age and overall health
- Possible side effects of treatment, such as scars or changes in your appearance, and your feelings about them

You might feel that you need to make a decision quickly, but it’s important to give yourself time to absorb the information you have just learned. It’s also very important to ask questions if there is anything you’re not sure about.
If time permits, it is often a good idea to seek a second opinion. A second opinion can give you more information and help you feel more confident about the treatment plan you choose.

- **What Should You Ask Your Health Care Team About Basal and Squamous Cell Skin Cancers?**
- **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. Still, they’re 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.

- **Clinical Trials**

**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 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 Alternative Medicine**

**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, 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.

- Find Support Programs and Services in Your Area

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 and 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
- Palliative or Supportive Care

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.

Surgery for Basal and Squamous Cell
Skin Cancers

Surgery is a common treatment for basal cell and squamous cell skin cancers. Different surgical techniques can be used. The options depend on the type of skin cancer, how large the cancer is, where it is on the body, and other factors. Most often the surgery can be done in a doctor’s office or hospital clinic using a local anesthetic (numbing medicine). For skin cancers with a high risk of spreading, surgery sometimes will be followed by other treatments, such as radiation or chemotherapy.

Excision

This is similar to an excisional biopsy (see Tests for Basal and Squamous Cell Skin Cancer), but in this case the diagnosis is already known. For this procedure, the skin is first numbed with a local anesthetic. The tumor is then cut out with a surgical knife, along with some surrounding normal skin. The remaining skin is carefully stitches back together, which will leave a scar.

Curettage and electrodesiccation

In this treatment, the doctor removes the cancer by scraping it with a long, thin instrument with a sharp looped edge on one end (called a curette). The area is then treated with an electric needle (electrode) to destroy any remaining cancer cells. This process is often repeated once or twice during the same office visit. Curettage and electrodesiccation is a good treatment for superficial (confined to the top layer of skin) basal cell and squamous cell cancers. It will leave a scar.

Mohs surgery (microscopically controlled surgery)

Mohs surgery is sometimes used when there is a high risk the skin cancer will come back after treatment, when the extent of the skin cancer is not known, or when the goal is to save as much healthy skin as possible, such as with cancers near the eye or other critical areas such as the central face, ears or fingers.

The Mohs procedure is done by a surgeon with special training. First, the surgeon removes a very thin layer of the skin (including the tumor) and then checks the removed sample under a microscope. If cancer cells are seen, another layer is removed and examined. This is repeated until the skin samples are free of cancer cells. This is a slow process, often taking several hours, but it means that more normal skin near the tumor can be saved. This can help the area look better after surgery.
Mohs can often offer better outcomes than some other forms of surgery and other treatments. But it’s also usually more complex and time-consuming than other methods. In recent years, skin cancer experts have developed guidelines for when it’s best to use this technique based on the type and size of skin cancer, where it is on the body, and other important features.

**Lymph node surgery**

If lymph nodes near a squamous or basal cell skin cancer are enlarged, the doctor might biopsy them to check for cancer cells (see Tests for Basal and Squamous Cell Skin Cancer\(^2\)).

Sometimes, many nodes might be removed in a more extensive operation called a *lymph node dissection*. The nodes are then looked at under a microscope for signs of cancer. This type of operation is more extensive than surgery on the skin and is usually done while you are under general anesthesia (in a deep sleep).

*Lymphedema\(^3\)*, a condition in which excess fluid collects in the legs or arms, is a possible long-term side effect of a lymph node dissection. If it’s severe enough, it can cause skin problems and an increased risk of infections in the limb. Elastic stockings and compression sleeves can be used to help people with this condition.

**Skin grafting and reconstructive surgery**

After surgery to remove a large basal or squamous cell skin cancer, it may not be possible to stretch the nearby skin enough to stitch the edges of the wound together. In these cases, healthy skin can be taken from another part of the body and grafted over the wound to help it heal and to restore the appearance of the affected area. Other reconstructive surgical procedures can also be helpful in some cases.

**Hyperlinks**

Local Treatments Other than Surgery for Basal and Squamous Cell Skin Cancers

Several techniques other than surgery can be used to treat basal and squamous cell skin cancers that have not spread to lymph nodes or other parts of the body. Some of these treatments are described as types of surgery since they destroy a targeted area of body tissue. But these techniques don’t use scalpels or cut into the skin.

Cryotherapy (cryosurgery)

Cryotherapy is used most often for pre-cancerous conditions such as actinic keratosis and for small basal cell and squamous cell carcinomas.

For this treatment, the doctor applies liquid nitrogen to the tumor to freeze and kill the cells. This is often repeated a couple of times in the same office visit. After the dead area of skin thaws, it will swell, blister and crust over.

The wound may have fluid draining from it for a while and take a month or two to heal. It will leave a scar, and the treated area may have less color after treatment.

Photodynamic therapy (PDT)

PDT can be used to treat actinic keratoses. But its exact role in treating basal and squamous cell skin cancers, if any, still needs to be determined.

This treatment uses a special liquid drug that is applied to the skin. The drug collects in the tumor cells over several hours or days, where it is converted to a different chemical that makes the cells very sensitive to certain types of light. A special light source is then
focused on the tumor(s), which kills the cells.

PDT can cause redness and swelling on the skin where it is used. Another possible side effect of PDT is that it can make a person’s skin very sensitive to sunlight for some time, so precautions may be needed to avoid severe burns.

To learn more about this technique, see Photodynamic Therapy¹.

**Topical chemotherapy**

Chemotherapy uses drugs that kill cancer cells. Topical chemotherapy means that an anti-cancer medicine is put directly on the skin (usually in a cream or ointment) rather than being given by mouth or injected into a vein.

**5-fluorouracil (5-FU):** The drug most often used in topical treatment of actinic keratoses, as well as some basal and squamous cell skin cancers, is 5-FU (with brand names such as Efudex, Carac, and Fluoroplex). It is typically applied to the skin once or twice a day for several weeks.

When put directly on the skin, 5-FU kills tumor cells on or near the skin’s surface, but it can’t reach cancer cells deeper in the skin or those that have spread to other organs. For this reason, 5-FU is generally used only for pre-cancerous conditions such as actinic keratosis and for some very superficial skin cancers.

Because the drug is only applied to the skin, it doesn’t spread throughout the body, so it doesn’t cause the same side effects as systemic chemotherapy (treatment that affects the whole body). But it does make the treated skin red and very sensitive for a few weeks. Other topical medicines can be used to help relieve this, if needed. 5-FU can also make the skin more sensitive to sunlight, so treated areas must be protected from the sun to prevent sunburn for a few weeks after use of this cream.

A very small portion of people have a condition called DPD deficiency, which makes it hard for their bodies to break down and get rid of 5-FU. This can result in serious or even life-threatening side effects. If you are applying 5-FU and have any reactions beyond those you were told to expect on your skin, call your doctor or nurse right away.

**Diclofenac (Solaraze):** A gel containing the drug diclofenac is sometimes used to treat actinic keratoses. This drug is part of a group of drugs called nonsteroidal anti-inflammatory drugs (NSAIDs), which includes aspirin and ibuprofen. The gel is usually applied twice daily for 2 or 3 months. It may cause less severe skin reactions than 5-FU, but it can also take longer to work.
**Ingenol mebutate (Picato):** This is a newer gel used to treat actinic keratosis that might work more quickly than other topical gels. It is applied to the skin daily for 2 or 3 days. The gel can cause bothersome skin reactions, but these usually start to go away within a week of starting treatment.

**Immune response modifiers**

Certain drugs can boost the body’s immune response against the cancer, causing it to shrink and go away.

**Imiquimod (Zyclara)** is a cream that can be applied to actinic keratoses and some very early basal cell cancers. It causes the immune system to react to the skin lesion and destroy it. It’s typically applied at least a few times a week for several weeks, although schedules can vary. Like other topical gels, it can cause severe skin reactions in some people. It can also cause flu-like symptoms.

**Interferon** is a man-made version of an immune system protein. It can be injected directly into the tumor to boost the immune response against it. It might be an option when surgery isn’t possible, but it may not be as effective as other treatments.

**Laser surgery**

This approach uses a beam of laser light to vaporize cancer cells. It’s sometimes used for actinic keratosis, squamous cell carcinoma in situ (Bowen disease), and for very superficial basal cell carcinomas (those only on the surface of the skin). It’s not yet known if this type of treatment is as effective as standard methods of treatment, and it’s not widely used.

**Chemical peeling**

For this technique, the doctor applies a small amount of trichloracetic acid (TCA) or another chemical to the skin tumor, killing the tumor cells over the course of several days. This approach is sometimes used to treat actinic keratosis.

**Hyperlinks**

Radiation Therapy for Basal and Squamous Cell Skin Cancers

Radiation therapy uses high-energy rays (such as x-rays) or particles (such as photons, electrons, or protons) to kill cancer cells.

When is radiation therapy used?

If a tumor is very large or is on an area of the skin that makes it hard to remove with surgery, radiation therapy may be used as the main treatment. Radiation therapy can also be useful for some patients who, for other health reasons, can't have surgery. Radiation therapy can often cure small basal or squamous cell skin cancers and can delay the growth of more advanced cancers.

Radiation is also useful when combined with other treatments. For example, radiation can be used after surgery as an adjuvant (additional) treatment to kill any small areas of remaining cancer cells that may not have been visible during surgery. This lowers the risk of cancer coming back after surgery. Radiation may also be used to help treat skin cancer that has spread to lymph nodes or other organs.

How is radiation therapy given?

When radiation therapy is used to treat skin cancers, the radiation is focused from outside the body onto the tumor. This is often done with a type of radiation called electron beam radiation. It uses a beam of electrons that don't go any deeper than the skin. This helps limit the side effects to other organs and body tissues.

Getting radiation treatment is much like getting an x-ray, but the radiation is stronger
and aimed more precisely at the cancer. The procedure itself is painless. Each treatment lasts only a few minutes, although the setup time – getting you into place for treatment – takes longer.

**Possible side effects of radiation**

Side effects of radiation are usually limited to the area getting radiation, and can include:

- Skin irritation, ranging from redness to blistering and peeling
- Changes in skin color
- Hair loss in the area being treated
- Damage to saliva-making glands and teeth when treating cancers near these structures

With longer treatment, these side effects may get worse.

After many years, **new skin cancers** sometimes develop in areas previously treated by radiation. For this reason, radiation usually is not used to treat skin cancer in young people. Radiation is also not recommended for people with certain inherited conditions (such as basal cell nevus syndrome or xeroderma pigmentosum), who may be at higher risk for new cancers, or for people with connective tissue diseases (such as lupus or scleroderma), which radiation might make worse.

To learn more about radiation therapy, see [Radiation Therapy](#).

**Hyperlinks**


**References**

Systemic Chemotherapy for Basal and Squamous Cell Skin Cancers

Systemic chemotherapy (chemo) uses anti-cancer drugs that are injected into a vein or given by mouth. These drugs travel through the bloodstream to all parts of the body. Unlike topical chemotherapy, which is applied to the skin, systemic chemotherapy can attack cancer cells that have spread to lymph nodes and other organs.

If squamous cell carcinoma has spread, chemo drugs such as cisplatin, doxorubicin, 5-fluorouracil (5-FU), capecitabine, topotecan, and etoposide might be used. These drugs are given into a vein (intravenously, or IV), usually once every few weeks. They can often slow the spread of these cancers and relieve some symptoms. In some cases, they might shrink tumors enough so that other treatments such as surgery or radiation therapy can be used.

Basal cell carcinoma very rarely reaches an advanced stage, so systemic chemotherapy is not typically used to treat these cancers. Advanced basal cell cancers are more likely to be treated with targeted therapy.

Possible side effects of chemotherapy

Chemo drugs can cause side effects\(^1\). These depend on the type and dose of drugs given and how long they are used. The side effects of chemo can include:

- Hair loss\(^2\)
- Mouth sores\(^3\)
- Loss of appetite\(^4\)
- Nausea and vomiting\(^5\)
- Diarrhea or constipation\(^6\)
- Increased risk of infection\(^7\) (from having too few white blood cells)
- Easy bruising or bleeding\(^8\) (from having too few blood platelets)
- Fatigue\(^9\) (from having too few red blood cells)
These side effects usually go away once treatment is finished. Some drugs can have specific effects that are not listed above, so be sure to talk with your cancer care team about what you might expect.

There are often ways to lessen these side effects. For example, drugs can help prevent or reduce nausea and vomiting. Tell your medical team about any side effects or changes you notice while getting chemo so that they can be treated promptly.

To learn more about chemo, see the Chemotherapy\textsuperscript{10} section of our website.

**Hyperlinks**


**References**

Targeted Therapy for Basal and Squamous Cell Skin Cancers

These drugs target parts of skin cancer cells that make them different from normal skin cells. Targeted drugs work differently from standard chemotherapy drugs. They may work sometimes when chemotherapy drugs don’t. They may also have less severe side effects. Doctors are still learning the best way to use these drugs to treat skin cancers.

Hedgehog pathway inhibitors

Examples of targeted drugs include vismodegib (Erivedge) and sonidegib (Odomzo), which can be used to treat some advanced or recurrent basal cell skin cancers.

It’s very rare for basal cell cancers to reach an advanced stage, but if they do, these cancers can be hard to treat. Most basal cell cancers have mutations (changes) in genes that are part of a cell signaling pathway called hedgehog. The hedgehog pathway is crucial for the development of the embryo and fetus and is important in some adult cells, but it can be overactive in basal cell cancer cells. These drugs target a protein in this pathway.

These drugs are capsules taken once a day. For basal cell cancers that have spread or come back after surgery or other local treatments, these drugs have been shown to help shrink tumors in some people, although it’s not yet clear if they help people live longer.

Side effects can include muscle spasms, joint pain, hair loss, fatigue, problems with taste, poor appetite and weight loss, nausea and vomiting, itchy skin, diarrhea, and constipation. These drugs can also cause women to stop having their periods.

Because the hedgehog pathway affects fetal development, these drugs should not be taken by women who are pregnant or could become pregnant. It is not known if they could harm the fetus if taken by a male partner. Anyone taking these drugs should use reliable birth control during and for some time after treatment.
Hyperlinks

2. www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects/fatigue.html
8. www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects/stool-or-urine-changes/constipation.html

References

See all references for Basal and Squamous Cell Skin Cancer (www.cancer.org/cancer/basal-and-squamous-cell-skin-cancer/references.html)

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Immunotherapy for Basal and Squamous Cell Skin Cancers

The immune system normally helps protect the body against germs, and it can also help destroy cancer cells. Immunotherapy is the use of medicines to stimulate a person’s own immune system to recognize and destroy cancer cells more effectively. It can be used to treat some people with advanced squamous cell skin cancer.
Immune checkpoint inhibitors

An important part of the immune system is its ability to keep itself from attacking normal cells in the body. To do this, it uses “checkpoints”, which are proteins on immune cells that need to be turned on (or off) to start an immune response.

Cancer cells sometimes take advantage of these checkpoints to avoid being attacked by the immune system. But drugs that target checkpoint proteins, called **checkpoint inhibitors**, can help restore the immune response against cancer cells.

**Cemiplimab (Libtayo)**

Cemiplimab (Libtayo) is a drug that targets PD-1, a checkpoint protein on T cells (a specific type of immune system cell) that normally helps keep these cells from attacking other cells in the body. By blocking PD-1, this drug boosts the immune response against cancer cells. It can be used in people with advanced squamous cell skin cancer that cannot be cured with surgery or radiation therapy.

This drug is given as an intravenous (IV) infusion, typically every 3 weeks.

Common side effects can include:

- Feeling tired
- Diarrhea
- Skin rash
- Nausea
- Constipation
- Bone or joint pain
- Loss of appetite

Other, more serious side effects occur less often:

**Infusion reactions:** Some people might have an infusion reaction while getting this drug. This is like an allergic reaction, and can include fever, chills, flushing of the face, rash, itchy skin, wheezing, and trouble breathing.

**Autoimmune reactions:** This drug works by basically removing one of the safeguards that keeps the immune system from attacking other parts of the body. This can sometimes lead to serious or even life-threatening problems in the lungs, intestines, liver, hormone-making glands, kidneys, or other organs.
It’s very important to report any new side effects to your health care team right away. If serious side effects do occur, treatment may need to be stopped and you may get high doses of corticosteroids to suppress your immune system.

To learn more about this type of treatment, see Immune Checkpoint Inhibitors to Treat Cancer¹.

Hyperlinks


References


Treating Basal Cell Carcinoma

Several types of treatment can be used to remove or destroy basal cell skin cancers. The options depend on factors such as the tumor size and location, and a person’s age, general health, and preferences. These cancers very rarely spread to other parts of the body, although they can grow into nearby tissues if not treated.

All of the treatments listed here can be effective. The chance of the cancer coming back (recurring) ranges from less than 5% after Mohs surgery to up to 15% or higher after some of the others, but this depends on the size of the tumor. Small tumors are less likely to recur than larger ones. Even if a tumor does recur, it can often still be treated effectively.

Surgery

Different types of [surgery](http://www.cancer.org) can be used to treat basal cell cancers.
Curettage and electrodesiccation: This is a common treatment for small basal cell carcinomas. It might need to be repeated to help make sure all of the cancer has been removed.

Excision: Excision (cutting the tumor out) is often used to remove basal cell carcinomas, along with a margin of normal skin.

Mohs surgery: Mohs surgery has the best cure rate for basal cell carcinoma. It’s especially useful in treating large tumors, tumors where the edges are not well-defined, tumors in certain locations (such as on or near the nose, eyes, ears, forehead, scalp, fingers, and genital area), and those that have come back after other treatments. However, it’s also usually more complex and time-consuming than other methods.

Radiation therapy

Radiation therapy is often a good option for treating patients who aren’t able to have surgery and for treating tumors on the eyelids, nose, or ears – areas that can be hard to treat surgically – especially in older patients where cure may not be as important as control over the long term. It’s also sometimes used after surgery if it’s not clear that all of the cancer has been removed.

Immune response modifiers, photodynamic therapy, or topical chemotherapy

1These treatments are sometimes options for treating very superficial tumors (tumors that have not grown too deeply into the skin). Close follow-up is needed because these treatments do not destroy any cancer cells that have grown deep below the surface.

Cryotherapy

2Cryotherapy (cryosurgery) can be used for some small basal cell carcinomas, but it’s not usually recommended for larger tumors or those on certain parts of the nose, ears, eyelids, scalp, or legs.

Cryotherapy can also be used to treat large tumors in one treatment session to relieve symptoms from the cancer. The site of treatment often takes a month or two to heal.

Targeted therapy for advanced basal cell cancers
In rare cases where basal cell cancer spreads to other parts of the body or can’t be cured with surgery or radiation therapy, a targeted drug such as vismodegib (Erivedge) or sonidegib (Odomzo) can often shrink or slow its growth.

Hyperlinks

References

See all references for Basal and Squamous Cell Skin Cancer (www.cancer.org/cancer/basal-and-squamous-cell-skin-cancer/references.html)

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Treating Squamous Cell Carcinoma of the Skin

Most squamous cell skin cancers are found and treated at an early stage, when they can be removed or destroyed with local treatment methods. Small squamous cell cancers can usually be cured with these treatments. Larger squamous cell cancers are harder to treat, and fast-growing cancers have a higher risk of coming back.

In rare cases, squamous cell cancers can spread to lymph nodes or distant parts of the body. If this happens, treatments such as radiation therapy and/or chemotherapy may be needed.

Surgery

Different types of surgery can be used to treat squamous cell skin cancers.

Excision: Cutting out the tumor, along with a small margin of normal skin, is often used to treat squamous cell cancers.

Curettage and electrodesiccation: This approach is sometimes useful in treating
small (less than 1 cm across), thin squamous cell cancers, but it’s not recommended for larger tumors.

**Mohs surgery**: Mohs surgery has the highest cure rate. It’s especially useful for squamous cell cancers larger than 2 cm (about 4/5 inch) across or with poorly defined edges, for cancers that have come back after other treatments, for cancers that are spreading along nerves under the skin, and for cancers on certain areas of the face or genital area. This approach is typically more complex and time-consuming than other types of surgery.

**Radiation therapy**

*Radiation therapy* is often a good option for patients with large cancers, especially in areas where surgery would be hard to do (such as the eyelids, ears, or nose), or for patients who can’t have surgery. It’s not used as much as the first treatment in younger patients because of the possible risk of long-term problems.

Radiation is sometimes used after surgery (simple excision or lymph node dissection) if all of the cancer was not removed (if the surgical margins were positive), if nerves are involved, or if there is a chance that some cancer may still be left.

Radiation can also be used to treat cancers that have come back after surgery and have become too large or deep to be removed surgically.

**Cryotherapy**

*Cryotherapy* (cryosurgery) is used for some early squamous cell cancers, especially in people who can’t have surgery, but is not recommended for larger invasive tumors or those on certain parts of the nose, ears, eyelids, scalp, or legs.

**Treating advanced squamous cell cancers**

**Lymph node dissection**: Removing regional (nearby) lymph nodes might be recommended for some squamous cell cancers that are very large or have grown deeply into the skin, as well as if the lymph nodes feel enlarged and/or hard. The removed lymph nodes are looked at under a microscope to see if they contain cancer cells. Sometimes, radiation therapy might be recommended after surgery.

**Systemic chemotherapy**: Chemotherapy is an option for patients with squamous cell cancer that has spread to lymph nodes or distant organs. Sometimes it’s combined with
surgery or radiation therapy.

**Immunotherapy:** Another option for advanced squamous cell cancers that can’t be cured with surgery or radiation therapy might be using an immunotherapy drug such as cemiplimab (Libtayo).

## References

See all references for Basal and Squamous Cell Skin Cancer

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### Treating Actinic Keratosis and Bowen Disease

**Actinic keratosis**

Actinic keratosis is often treated because it can turn into squamous cell skin cancer. But because this risk is low, treatments are generally aimed at avoiding scars or other disfiguring marks as much as possible.

Actinic keratosis is often treated with either cryotherapy or topical creams or gels such as fluorouracil (5-FU), imiquimod, diclofenac, or ingenol mebutate. These treatments destroy the affected area of the epidermis, the outermost layer of the skin, which usually cures actinic keratosis.

Other localized treatments (shave excision, curettage and electrodesiccation, photodynamic therapy, laser surgery, chemical peeling) are also sometimes used.

**Bowen disease**
Bowen disease (squamous cell carcinoma in situ) is usually treated by excision (cutting out the tumor). Mohs surgery, curettage and electrodesiccation, radiation therapy, topical fluorouracil (5-FU), and cryosurgery are other options. Laser surgery or topical therapy may be considered in special situations.

References

See all references for Basal and Squamous Cell Skin Cancer (www.cancer.org/cancer/basal-and-squamous-cell-skin-cancer/references.html)

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Written by

The American Cancer Society medical and editorial content team (www.cancer.org/cancer/acs-medical-content-and-news-staff.html)

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