Treating Lymphoma of the Skin

General treatment information

In recent years, much progress has been made in treating skin lymphoma, and several newer types of treatment have come into use.

Once a skin lymphoma is found and staged, your health care team will discuss your treatment options with you. The treatment options for a person with skin lymphoma depend on the kind of lymphoma and its stage, as well as other factors such as your overall health. Of course, no two patients are exactly alike, and treatment options are tailored to each patient’s situation.

Several types of treatment can be used for skin lymphoma. These can generally be divided into:

- Treatments directed only at the skin
- Treatments that can affect the whole body (systemic treatments)

Sometimes these treatments are used together. See “Treatment for specific types of skin lymphoma” for information on common treatment plans.

Based on your treatment options, you might have different types of doctors on your treatment team. These doctors may include:

- A dermatologist: a doctor who treats diseases of the skin
- A hematologist: a doctor who treats disorders of the blood, including lymphomas
- A medical oncologist: a doctor who treats cancer with medicines
- A radiation oncologist: a doctor who treats cancer with radiation therapy

Many other specialists might be part of your treatment team as well, including nurse practitioners, physician assistants, nurses, nutritionists, social workers, and other health professionals. See Health Professionals Associated With Cancer Care for more on this.
It is 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. It’s also very important to ask questions if there is anything you’re not sure about. You can find some good questions to ask in What Should I Ask My Doctor About Lymphoma of the Skin?

If time allows, it is often a good idea to get a second opinion. A second opinion can provide more information and help you feel confident about the treatment plan you choose.

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 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 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.

Skin-Directed Treatments for Skin Lymphomas

The first treatment for many skin lymphomas is directed at the skin lesions themselves, while trying to avoid harmful side effects on the rest of the body. There are many ways to treat skin lesions.

Surgery

Surgery is not usually the only treatment for skin lymphoma, but it can be helpful in some situations. Surgery may be used to biopsy a skin lesion, lymph node, or other tissue to diagnose and classify a lymphoma. It might also be used to treat some types of skin lymphomas when there is only one or a few skin lesions that can be removed completely. Even then, other types of treatment may be used as well.

Radiation therapy

Radiation therapy uses high-energy rays to kill cancer cells. The treatment is much like getting an x-ray, but the radiation is stronger. The procedure itself is painless.
The type of radiation used most often for skin lymphomas is called electron beam radiation. It uses a beam of electrons that only penetrate as far as the skin, so there are few side effects to other organs and tissues. The main side effect of electron beam therapy is a skin reaction similar to sun burn. For mycosis fungoides and Sezary syndrome, electron beam therapy is sometimes given to the entire body. This is called total skin electron beam therapy (or TSEBT). This can sometimes cause loss of all hair on the body, as well as loss of fingernails and toenails.

Some thicker lymphomas that are not widespread (especially single lesions) are treated with high energy radiation (like x-rays or gamma rays) instead of electrons. This kind of radiation can penetrate deeper into the body. Because it can damage internal organs, the treatment is planned carefully so that most of the radiation goes only to the skin.

To learn more about radiation therapy, see the Radiation Therapy section of our website.

**Phototherapy (UV light therapy)**

Ultraviolet (UV) light is the part of sunlight that causes sunburn and skin cancer. Phototherapy uses UV light to kill cancer cells in the skin. This is a useful treatment for some people with skin lymphomas that aren't very thick.

Two kinds of UV light – ultraviolet A (UVA) and ultraviolet B (UVB) – can be used to treat skin lymphoma. Both UVA and UVB treatments are given with special fluorescent lamps like those used in tanning salons. But unlike those used in tanning salons, the light boxes used for treatment are calibrated so your doctor knows exactly which wavelength and dose of light you are getting to minimize the risk of burns. Treatments are given about 3 times a week.

When UVA is used, it is combined with drugs called psoralens. This combination is referred to as PUVA. Psoralens are given as a pill about 2 hours before the treatment. The drug travels through the blood to reach cells throughout the body (including cells of skin lymphoma). When these cells are then exposed to UVA light, the drug is activated, killing them. Psoralens can cause some nausea. They can also make the skin and eyes very sensitive to sunlight (increasing the risk of severe skin burns and cataracts), so it is important to protect yourself from sunlight as much as possible in the days after treatment.

UVB is given without any extra medicines, and is generally used for thinner skin lesions.

Just like the UV light in sunlight, these treatments can cause sunburn and may raise the
risk of skin cancer later in life, so doctors try to avoid giving too much UV light.

**Topical medicines**

Treatment that applies drugs directly to the skin is called *topical therapy*. It can be very helpful in treating many early skin lymphomas. When a drug is placed on the skin, its effects are concentrated on that spot, with much smaller amounts reaching the rest of the body. This can help limit side effects, especially for strong medicines such as some chemotherapy drugs.

**Topical corticosteroids:** These are drugs related to cortisol, a hormone made naturally in the body that can affect immune cells such as lymphocytes. Corticosteroid pills and injections into the blood have long been an important part of treating lymphomas.

These drugs can also be applied directly to the skin in the form of ointments, gels, and creams, or injected directly into skin lesions. This can be very helpful in treating skin lesions. When applied to the skin, less of the drug is absorbed, resulting in fewer side effects. Long-term use of topical corticosteroids may cause the skin in that area to become thinner.

**Topical chemotherapy drugs:** Chemotherapy (chemo) drugs are strong medicines often given by mouth or injected into a vein to treat more advanced cancers (including advanced skin lymphomas – see Whole-body (Systemic) Treatments for Skin Lymphomas).

Some chemo drugs can be used to treat earlier forms of skin lymphoma by putting them directly on the skin (usually in a cream or ointment). The drugs most often used to treat skin lymphoma include mechlorethamine (nitrogen mustard) and carmustine (BCNU). Possible side effects include redness, swelling, or irritation where the drug is applied, as well as an increased risk of other types of skin cancer in the area.

**Topical retinoids:** Retinoids are drugs related to vitamin A. They can affect certain genes in lymphoma cells that cause them to grow or mature.

Some retinoids, such as bexarotene (Targretin), come in a gel that can be applied directly to skin lesions. Possible side effects include redness, itching, irritation, and sensitivity to sunlight in the area where the drug is applied. These drugs can cause birth defects, so they should not be used by women who are or could become pregnant.

**Topical immune therapy:** Imiquimod (Zyclara) is a cream that causes an immune system reaction when applied to skin lesions, which may help destroy them. This drug is
used mainly to treat some other types of skin cancers, but some doctors may also use it to treat early forms of skin lymphoma. It can cause redness, itching, and irritation at the site where it is applied.

- **References**
  See all references for Lymphoma of the Skin

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**Whole-Body (Systemic) Treatments for Skin Lymphomas**

Systemic treatments can affect the whole body. They are most useful for more advanced or quickly growing skin lymphomas. In some cases, a systemic treatment is combined with a skin-directed treatment or with another systemic treatment.

**Photopheresis (photoimmune therapy)**

This treatment is also called *extracorporeal photopheresis*, or ECP. It is sometimes used for T-cell skin lymphomas, especially Sezary syndrome. It is thought to work by killing some lymphoma cells directly and by boosting the body’s immune response against other lymphoma cells.

The procedure is similar to donating blood, but instead of going into a collecting bag, the blood goes into a special machine that separates out the lymphocytes (including lymphoma cells). They are then treated with a psoralen (a light-sensitizing drug) and UVA light before they are mixed back in with the rest of the blood and infused back into the patient. Each procedure usually takes a few hours. Treatments are typically given for 2 days in a row, and then repeated every 4 weeks or so.

Side effects are usually minor. The most significant side effect is sensitivity to sunlight for about a day after each treatment, which might result in sunburn or other problems. It is very important to protect yourself from sunlight as much as possible during this time.
Systemic chemotherapy

Chemotherapy (chemo) uses strong drugs to treat cancer. When the drugs are injected into a vein or a muscle or taken by mouth, they enter the bloodstream and reach all areas of the body.

Systemic chemo is not often used for early skin lymphoma, but it may be used if the disease in the skin is more advanced and no longer getting better with other treatments. It can also be helpful if the lymphoma has spread to lymph nodes, blood, or distant organs and tissues.

Many chemo drugs are useful in treating patients with skin lymphoma, including:

- Gemcitabine
- Liposomal doxorubicin (Doxil)
- Methotrexate
- Chlorambucil
- Cyclophosphamide
- Pentostatin
- Etoposide
- Temozolomide
- Pralatrexate

Often a single drug is tried first, but sometimes patients are treated with drug combinations like those used for lymphoma not involving the skin. For example, a chemo regimen called CHOP (cyclophosphamide, doxorubicin, vincristine, and prednisone) may be used, often along with the monoclonal antibody rituximab (Rituxan), which is described below.

Chemo treatments are given on different schedules, but usually they are repeated several times in cycles given 3 or 4 weeks apart. Most chemo treatments are given on an outpatient basis (in the doctor’s office, clinic, or hospital outpatient department), but some require a hospital stay.

Patients often get chemo for 2 or 3 cycles and then have tests (such as PET or CT scans) to see if it is working. If the first chemo regimen doesn’t seem to be working, different drugs may be tried.

More information about chemo for non-Hodgkin lymphoma can be found in Non-Hodgkin Lymphoma.
**Possible side effects**

Chemo drugs attack cells that are dividing quickly, which is why they work against cancer cells. But other cells, such as those in the bone marrow (where new blood cells are made), the lining of the mouth and intestines, and the hair follicles, also divide quickly. These cells are also likely to be affected by chemo, which can lead to side effects. Side effects depend on the drugs used, their dose, and the length of treatment. Some common side effects include:

- Hair loss
- Mouth sores
- Loss of appetite
- Nausea and vomiting
- Diarrhea
- Increased chance of infection (from a shortage of white blood cells)
- Bleeding or bruising after minor cuts or injuries (from a shortage of platelets)
- Fatigue or shortness of breath (from low red blood cell counts)

These side effects are usually temporary and go away after treatment is finished. If serious side effects occur, the chemo may have to be delayed or the doses reduced. There are often ways to lessen side effects. For example, drugs can be given to help prevent and reduce nausea and vomiting.

A major concern with chemo is its effect on the patient’s immune system, which is often already damaged by the lymphoma itself. This sometimes limits how intense the chemo treatment can be. Drugs known as *growth factors* (G-CSF or GM-CSF, for example) are sometimes given after chemo to help the body make new white blood cells to reduce the chance of a serious infection. Antibiotics may also be given at the earliest sign of an infection, such as a fever.

If your white blood cell counts are very low during treatment, you can help reduce your risk of infection by limiting your exposure to germs. During this time, your doctor may advise you to:

- Wash your hands often.
- Avoid fresh, uncooked fruits and vegetables and other foods that might carry germs.
- Avoid fresh flowers and plants because they may carry mold.
- Make sure other people wash their hands before they come in contact with you.
- Avoid large crowds and people who are sick.

If your platelet counts are very low, you may be given drugs or platelet transfusions to
help protect against bleeding. Fatigue caused by anemia (very low red blood cell counts) can be treated with drugs or with red blood cell transfusions.

Although most side effects go away after chemo is stopped, some can be long-lasting or might not occur until months or years after treatment has ended. For example, drugs like doxorubicin can damage the heart. Other drugs can sometimes damage the kidneys, nerves, or other organs. In rare cases, people develop leukemia several years later. Before you start chemo, ask your doctor or nurse what drugs will be used and what the side effects might be.

To learn more about chemo, see the Chemotherapy section of our website.

**Targeted and biologic therapies**

In recent years, many newer drugs have been developed to treat skin lymphomas. Some of these drugs target specific parts of lymphoma cells. Others work by boosting the body’s immune system to attack lymphoma cells.

These drugs work differently from standard chemo drugs, which generally affect all fast-growing cells. They sometimes work when chemo drugs don’t. They also tend to have different (and often milder) side effects than standard chemo drugs.

**Vorinostat (Zolinza):** This is a cancer-fighting drug known as a histone deacetylase (HDAC) inhibitor. It is given as a pill, once a day. It is used to treat T-cell skin lymphomas, usually after other treatments have been tried. Side effects tend to be mild, but can include nausea, diarrhea, lowered blood cell counts, and effects on the rhythm of the heart.

**Romidepsin (Istodax):** Romidepsin is another HDAC inhibitor. It is also used to treat T-cell skin lymphomas, usually after other treatments have been tried. This drug is given as an infusion into a vein (IV), usually once a week. Side effects are similar to those of vorinostat.

**Denileukin diftitox (Ontak):** This drug combines part of an interleukin-2 (IL-2) molecule with diphtheria toxin. The drug attaches to the IL-2 receptor on certain lymphocytes and lymphoma cells, where the diphtheria toxin can kill these cells. The drug is given as an IV infusion daily for 5 days in a row. It is used mainly in patients whose skin lymphoma has gotten worse (or come back) after another treatment.

Common side effects during the first day of treatment can include low blood pressure, shortness of breath, back pain, and rash. Patients getting this drug may also feel like
they have the flu within the first few days of treatment. This improves with treatment and
time. Vision problems that might not go away even after treatment is stopped are a rare
side effect of this drug.

**Rituximab (Rituxan):** This drug is a monoclonal antibody – a man-made version of an
immune system protein that has a very specific target. This antibody attaches to CD20,
a substance on the surface of most B lymphocytes, which causes the cells to die.

Rituximab can be used alone or with other drugs to treat B-cell skin lymphomas.
Treatments are usually given as IV infusions weekly or at longer intervals.

Common side effects are often mild but can include chills, fever, nausea, rashes,
fatigue, and headaches, especially during the first infusion. Side effects are less likely
with later doses. Rituximab can also increase a person’s risk of infections. It can cause
prior hepatitis B infections to become active again, sometimes leading to severe liver
problems or even death. Your doctor will probably test you for hepatitis before giving
you this drug.

**Alemtuzumab (Campath):** This monoclonal antibody targets the CD52 protein found
on some types of lymphocytes and lymphoma cells. When the antibody binds to this
protein, it triggers the immune system to destroy the cell. This drug is given by injection
either under the skin (subcutaneous) or into a vein (IV), usually several times a week.

Alemtuzumab works well against some types of skin lymphoma, but it can have serious
side effects, especially when given IV. Some people have allergic reactions during the
first few infusions, which can sometimes be serious. Doctors usually give a low dose at
first and gradually increase it to try to prevent this.

In some people, alemtuzumab can severely weaken the immune system. This can lead
to serious or even life-threatening infections with germs that aren’t usually a problem for
healthy people.

Because of these risks, alemtuzumab is not often used as a first treatment. It may be an
option for people with skin lymphoma that has come back after other treatments.

**Interferons:** The interferons are hormone-like proteins normally made by white blood
cells to help the immune system fight infections. Certain types of interferon can be
made in the lab and given as medicine. Interferons can cause some types of skin
lymphomas to shrink or stop growing. Usually they are injected under the skin several
times a week.

People getting this treatment often have flu-like side effects, such as fatigue (which can
be severe), fever, chills, headaches, muscle and joint aches, and mood changes. The side effects tend to be worse when higher doses are used.

**Systemic retinoids**

Retinoids are drugs related to vitamin A. Retinoids such as all-trans retinoic acid (ATRA), acitretin, isotretinoin (Accutane), and bexarotene (Targretin) can be used to treat some skin lymphomas, especially mycosis fungoides and Sézary syndrome. Bexarotene can be used as a **topical treatment** when only a few small skin lesions are present, but retinoids are often taken in pill form for skin lymphomas that are more widespread.

Side effects of systemic retinoids can include headache, nausea, fever, increased blood levels of triglycerides (fats), thyroid problems, and eye problems. Some retinoids can cause more serious side effects, like fluid buildup in the body. These drugs should never be given to a woman who is pregnant or who might become pregnant, as they can cause serious birth defects.

**High-dose chemotherapy with stem cell transplant (SCT)**

Stem cell transplants are sometimes used to treat lymphoma when standard treatments are no longer working. Doctors aren't yet sure exactly how well this type of treatment works for patients with skin lymphoma, but studies are now being done to find out, and it may become more common in the future.

Stem cell transplants let doctors give higher doses of chemotherapy (and sometimes radiation) than could normally be given. High-dose chemo destroys the bone marrow, where new blood cells are made. This could lead to life-threatening infections, bleeding, and other problems due to low blood cell counts.

Doctors try to get around this problem by giving the patient an infusion of blood-forming stem cells after treatment. Stem cells are very early forms of cells that can create new blood cells. They travel to the bone marrow and start making new blood cells.

The blood-forming stem cells used for a transplant come either from the blood (for a peripheral blood stem cell transplant, or PBSCT) or from the bone marrow (for a bone marrow transplant, or BMT). Peripheral blood stem cells are collected in a procedure similar to a blood donation, while bone marrow donation is usually done in an operating room with the donor under general anesthesia (in a deep sleep). Bone marrow transplants were more common in the past, but they have largely been replaced by PBSCTs.
**Allogeneic stem cell transplant**

In an allogeneic stem cell transplant, the blood-forming stem cells come from another person (instead of using the patient’s own stem cells). The ideal donor is a relative (often a brother or sister) whose tissue type (HLA type) matches the patient’s. This lowers the chance of having serious problems with the transplant.

This is often the preferred type of transplant if it can be done, but it is often hard to find a matched donor. Another drawback is that side effects of this treatment might be too severe for most older patients.

**Non-myeloablative (mini) transplant:** In this type of allogeneic transplant, lower doses of chemo and radiation are used than in a standard SCT. This may be an option for some patients who couldn’t tolerate a regular allogeneic transplant because of its side effects.

The lower dose treatment doses do not completely destroy the cells in the bone marrow. When the donor stem cells are given, they establish a new immune system, which sees the lymphoma cells as foreign and attacks them.

**Autologous stem cell transplant**

In this type of transplant, a patient’s own stem cells are removed from his or her bone marrow or blood. They are collected over several days in the weeks before treatment. The cells are frozen and stored while the person gets treatment (high-dose chemo and/or radiation) and are then are reinfused into the patient’s blood.

Autologous transplants are not used much for skin lymphomas.

**Practical points**

A stem cell transplant is a complex treatment that can cause life-threatening side effects. If doctors think a patient might benefit from a transplant, the best place to have it done is at a cancer center where the staff has experience with the procedure and with managing the recovery period. Ask the doctor about the number of times he or she has done this procedure, the number done at their facility, and their results with cases such as yours.

SCT often requires a long hospital stay and can be very expensive (often costing well over $100,000). Some insurance companies may view SCT as an experimental treatment and may not pay for it. Even if the transplant is covered by your insurance, your co-pays or other costs could easily amount to many thousands of dollars. Find out
what your insurer will cover before the transplant so you will have an idea of what you might have to pay.

**Possible side effects**

Side effects from a stem cell transplant are generally divided into early (short-term) and late (long-term) effects.

**Early or short-term effects:** The early complications and side effects are basically those caused by high-dose chemo, and can be severe. They can include:

- Low blood cell counts (with fatigue and increased risks of infection and bleeding)
- Nausea and vomiting
- Mouth sores
- Loss of appetite
- Diarrhea
- Hair loss

One of the most common and serious short-term effects is the increased risk of serious infections. Patients often stay in a special hospital room right after the transplant to help protect them from germs, and antibiotics are often given to try to prevent infections. Other side effects, like low red blood cell and platelet counts, might require blood product transfusions or other treatments.

**Late or long-term side effects:** Complications and side effects that can last for a long time or that may occur many years after the transplant include:

- Graft-versus-host disease (GVHD), a serious side effect in which the new immune system attacks the patient’s own body tissues. This can cause skin rashes, itching, mouth sores (which can affect eating), nausea, severe diarrhea, liver damage, and other problems. GVHD occurs only in allogeneic (donor) transplants.
- Menstrual changes, early menopause, and loss of fertility in female patients (caused by damage to the ovaries)
- Menstrual changes, early menopause, and loss of fertility in male patients
- Damage to the thyroid gland, causing problems with metabolism
- Cataracts (damage to the lens of the eye that can affect vision)
- Bone damage called *aseptic necrosis*. If damage is severe, the patient might need to have part of the affected bone and the joint replaced.
- Damage to the lungs, causing shortness of breath
- Development of another cancer (such as leukemia) years later

For more on stem cell transplants, see [Stem Cell Transplant for Cancer](#).
Treatment for Specific Types of Skin Lymphoma

The treatment of skin lymphoma is based mainly on the type of lymphoma, as well as its location and its stage – how far it has spread in the body. But other factors, such as your overall health, can also affect your treatment options. Talk to your doctor if you have any questions about the treatment plan he or she recommends.

The treatments mentioned in this section are discussed in more detail in earlier sections of this document.

T-cell lymphomas

Mycosis fungoides

Many forms of treatment can be used for mycosis fungoides (MF).

**Skin-directed treatments:** For early stages of MF, treatments are aimed at the skin. Options may include:

- Phototherapy with ultraviolet (UV) light (either UVB light or UVA combined with drugs called psoralens, known as PUVA)
- Topical chemotherapy with BCNU or nitrogen mustard
- Topical corticosteroid ointments or injections
- Topical retinoids (vitamin A-like drugs), such as bexarotene
- Topical imiquimod
- Local radiation treatments if there is only one or a few lesions
Total skin electron beam therapy (TSEBT) if MF covers most of the skin
Sometimes more than one type of skin-directed treatment is used.

**Systemic (whole-body) treatments:** Mycosis fungoides might stay limited to the skin for many years. But eventually it might spread, and patients may need systemic treatments.

Several types of treatment can be used, such as:

- Retinoids (taken by mouth)
- Targeted drugs like vorinostat (Zolinza) or romidepsin (Istodax)
- Photopheresis
- Interferons
- Denileukin diftitox (Ontak)
- Low-dose methotrexate (a chemo drug)

Chemotherapy (usually with a single drug) or alemtuzumab (Campath) might be other options, but they are often reserved for lymphomas that are no longer responding to other treatments. If single chemo drugs are not effective, combinations of drugs (similar to those used for other types of non-Hodgkin lymphoma) might be recommended.

More than one type of treatment might be used at the same time. This could include combinations of skin-directed and systemic treatments (such as TSEBT plus photopheresis) or combined systemic treatments (such as an oral retinoid plus interferon).

Many patients can be helped by these treatments, sometimes for many years, but they rarely cure the lymphoma. If other treatments are no longer working, a stem cell transplant may be an option. Newer treatments are also being studied. If current treatments are no longer helpful, patients may want to consider entering a **clinical trial**.

**Sezary syndrome**

The **systemic treatments** used for advanced MF are also used to treat Sezary syndrome. This disease has usually spread beyond the skin at the time it is diagnosed, so **treatments directed only at the skin** are less useful than in MF (although some might still be part of treatment).

Photopheresis may be helpful in treating the disease, as may retinoids, such as bexarotene. The targeted treatments vorinostat and romidepsin might also be used, as might interferon or denileukin diftitox. Chemotherapy or alemtuzumab can also be
useful, but these are usually reserved for lymphomas that are no longer responding to other treatments. A stem cell transplant might be another option if other treatments are no longer working.

As with advanced MF, these treatments are often helpful for a time, but they rarely result in a cure. Newer treatments are now being studied, and patients may want to consider entering a clinical trial of one of these.

**Primary cutaneous anaplastic large cell lymphoma (ALCL)**

This lymphoma usually stays confined to the skin. It seldom spreads inside the body and rarely causes death. If it’s not causing symptoms, it can often be monitored closely without needing to be treated right away. The skin lesions may even go away on their own, without any treatment.

If treatment is needed, surgery and/or radiation therapy are the most common options for single skin lesions (or small groups of lesions). Topical chemotherapy, retinoids, or other medicines might be options if there are skin lesions in several places.

If the lymphoma comes back after treatment and spreads to lymph nodes or (rarely) internal organs, then systemic chemotherapy is often used. Newer targeted drugs such as brentuximab vedotin (Adcetris) and crizotinib (Xalkori) have been shown help some patients with non-skin forms of ALCL. These might also be options for advanced cutaneous ALCL, although more research is needed.

**Lymphomatoid papulosis**

This disease often comes and goes on its own and usually has such a good outlook that treatment is not needed right away. If treatment is needed, phototherapy and topical corticosteroids are the most common treatments if there are only a few skin lesions. If the lesions are more extensive, topical chemotherapy or systemic treatments such as oral retinoids or low-dose methotrexate are other options. Rarely is there any need for systemic chemotherapy.

**Subcutaneous panniculitis-like T-cell lymphoma**

Patients with this type of lymphoma can live a long time and generally have an excellent outlook. Although chemotherapy and radiation have been used successfully in the past, the disease can often be controlled for long periods with just corticosteroids.
Primary cutaneous peripheral T-cell lymphoma, unspecified

Primary cutaneous aggressive epidermotropic CD8+ cytotoxic T-cell lymphomas are usually fast growing and are treated with systemic chemotherapy.

Primary cutaneous gamma/delta T-cell lymphoma tends to grow and spread very quickly. It is treated with systemic chemotherapy or radiation therapy, but generally does not respond well to treatment.

Primary cutaneous CD4+ small/medium sized pleomorphic T-cell lymphoma may be removed with surgery or treated with radiation if there is only a single tumor. If there are many tumors, systemic chemotherapy or corticosteroids are often effective. People with this lymphoma generally have a good outlook, especially if they have only one tumor.

Primary cutaneous peripheral T-cell lymphoma, unspecified, is treated with systemic chemotherapy. Although these lymphomas may respond to chemotherapy at first, they often come back later, at which point they can be very hard to treat.

These lymphomas are often hard to treat effectively, so patients may want to consider clinical trials studying newer forms of treatment.

B-cell lymphomas

Primary cutaneous marginal-zone B-cell lymphoma or Primary cutaneous follicle-center lymphoma

These types of lymphoma can sometimes be watched without treatment until problems develop. For lymphomas that are in one spot or only a few spots close together, initial treatment is usually radiation therapy or surgery. If the lymphoma does not go away completely or keeps growing, further treatment may include surgery; radiation therapy; topical medicines such as corticosteroids, chemotherapy, bexarotene (Targretin), or imiquimod (Zyclara); or injected corticosteroids.

For lymphomas that have spread over larger parts of the skin, treatment options include rituximab (Rituxan), topical medicines (such as corticosteroids, chemotherapy, bexarotene, or imiquimod), radiation therapy, or injected corticosteroids. Systemic chemotherapy (sometimes with rituximab), like that used for other slow-growing B-cell lymphomas, can also be used if there are many lesions.
If the lymphoma has spread to lymph nodes or internal organs, it is treated like follicular lymphomas found in other parts of the body, typically with a combination of chemotherapy and rituximab (see Non-Hodgkin Lymphoma for more details).

Primary cutaneous diffuse large B-cell lymphoma, leg type

These lymphomas might look like they involve only a small area of the skin at first, but the disease is often more widespread than it first appears. The treatment of choice is rituximab along with systemic chemotherapy. Often the regimen called R-CHOP (rituximab plus cyclophosphamide, doxorubicin, vincristine, and prednisone) is given, but other chemo combinations can also be used. If the lymphoma is in only one or a few areas, radiation therapy directed at the tumors is often used as well. For people who can’t tolerate chemotherapy, radiation therapy alone may be given.

If the lymphoma has spread to the lymph nodes or other organs, treatment is the same as that used for diffuse large B-cell lymphomas (DLBCLs) found in other parts of the body, which is usually R-CHOP, with or without radiation therapy (see Non-Hodgkin Lymphoma for more details).

Primary cutaneous diffuse large B-cell lymphoma, other (non-leg)

Patients with this type of lymphoma (which involves sites other than the leg) need systemic chemotherapy, similar to that used for primary cutaneous diffuse large B-cell lymphoma, leg type. This is most often the R-CHOP regimen (rituximab plus cyclophosphamide, doxorubicin, vincristine, and prednisone).

- References
See all references for Lymphoma of the Skin

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What If the Lymphoma Keeps Growing or Comes Back After Treatment?
Some lymphomas may not respond well to treatment. Most often, other types of treatment can then be tried. But as more treatments are tried, they may be less likely to work or more likely to cause side effects.

When a cancer comes back after treatment it is called recurrent or relapsed. In general, if a skin lymphoma comes back it tends to be in the skin. If this is the case, skin-directed therapies that haven’t been used yet may be effective.

Some skin lymphomas eventually spread inside the body as well. Often, lymph nodes are the first site of relapse. After that, it may spread to organs such as the liver, spleen, and bone marrow. Different types of systemic treatments may be helpful in this situation. Chemotherapy is often used, especially if the patient hasn’t had chemo before. Depending on the type of lymphoma, other drugs, such as vorinostat (Zolinza), romidepsin (Istodax), alemtuzumab (Campath), and denileukin diftitox (Ontak), might also be options for a relapse. A stem cell transplant may be another option at some point.

Advanced skin lymphomas are very hard to cure. Different systemic treatments may be effective for some time. But in general, the more treatments a person has had, the less likely it is that the next treatment will be helpful. If the lymphoma improves with later treatments, it often comes back sooner than it did before. Over time, treatments tend to provide less benefit, but they can still cause side effects.

One option might be to consider clinical trials of newer treatments that work in new ways. But at some point, a person might want to think about treatments aimed more at relieving the symptoms of the lymphoma, rather than trying to get rid of it with more aggressive treatments that have a very small chance of success. This approach is called palliative care.

For example, if lymph nodes enlarge, they can press on nerves and cause pain. Radiation therapy to these areas can often help relieve the pain. Treatment with appropriate pain medicines is also important. Help with pain treatment from a palliative care team may be required.

Some lymphoma symptoms can result from low blood counts. Fatigue may be caused by low red blood cell counts (anemia). Sometimes blood transfusions may be used to increase the number of red blood cells and help a person feel better. Low white blood cell counts (from chemotherapy or from the lymphoma itself) can lead to infections. Certain drugs such as G-CSF (Neupogen) or GM-CSF (Leukine) may be used to increase the white blood cell count.

Nausea and loss of appetite can occur because of the disease or its treatment. These
symptoms can also be treated effectively with drugs, as well as high-calorie food supplements. If the lymphoma involves the lungs, patients may get short of breath. Oxygen may be used to help treat this symptom. See the Physical Side Effects section of our website for more information on side effects from cancer and cancer treatment.

Some people may become depressed. Counseling and medication may be helpful. If depression is a problem, it is important to discuss your feelings with your doctor or nurse, so that appropriate treatment can be started. See the Emotional Side Effects section of our website for information on coping with cancer.

For more on dealing with lymphoma that is no longer responding to treatment, see If Treatment of Lymphoma of the Skin Is No Longer Working.

- References
See all references for Lymphoma of the Skin

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