

Understanding Lymphoma Cutaneous B-Cell Lymphoma

Cutaneous B-cell lymphoma (CBCL) is a general term for non-Hodgkin B-cell lymphomas that primarily involve the skin.

CBCLs are the minority of skin lymphomas, as most skin lymphomas are T-cell lymphomas. When *extranodal* lymphomas (lymphomas that arise in tissues or organs outside of the lymphatic system) originate in the skin and there is no evidence of disease outside of the skin, they are called primary cutaneous lymphomas. Primary CBCLs occur when the lymphoma originates from B lymphocytes. CBCLs are rare, often *indolent* (slow growing), and may appear on the skin as a rash, reddish bump, lump, or nodule, usually with a raised and smooth appearance. They can appear as a single lesion or multiple lesions in either one body region or several. Many skin conditions may look similar but are not CBCLs. The disease can *relapse* (return after treatment) or occur in new places on the skin, but it rarely develops into a disease that affects other non-skin areas of the body. About 50 percent of patients with single lesions are cured after radiation therapy. However, patients with multiple lesions are more likely to continue to have new lesions appear. This fact does not affect prognosis, which remains very good.



TYPES OF CBCL

Primary Cutaneous Follicle Center Lymphoma is the most common type of CBCL. These skin lymphomas are indolent, developing slowly over months or years. They usually appear on the head, neck, or torso of the body as a red-brown bumpy skin eruption, nodule(s), or tumor(s).

Primary Cutaneous Marginal Zone B-Cell Lymphoma is the second most common form of CBCL. These *indolent* (slow-growing) lymphomas can have a similar appearance as cutaneous follicle center lymphoma, often as pink or red bumpy lesion(s) or nodule(s), most commonly found on the torso or arms. Some cases are linked to an infection with *Borrelia burgdorferi*, a type of bacteria carried by ticks that causes Lyme disease.

Primary Cutaneous Diffuse Large B-Cell Lymphoma (CDLBCL), Leg-Type is a rare type of CBCL but is usually more *aggressive* (fast-growing), developing over weeks or months. This lymphoma usually appears as solitary or multiple tumor nodules on the legs, but can involve non-leg areas, such as the arms and/or torso. The lesions may ulcerate and spread outside the skin more frequently than slow-growing CBCLs.

Other types of CDLBCL include a group of very rare, aggressive lymphomas, such as intravascular large B-cell lymphoma, T-cell-rich large B-cell lymphoma, plasmablastic lymphoma, and anaplastic B-cell lymphoma. These lymphomas are not always cutaneous and usually appear on the head, torso, and extremities.

In CBCL, like in other cutaneous lymphomas, disease severity

is classified by stage. Staging is determined based on the amount of skin involvement, lymph node involvement, and *extracutaneous* involvement (involvement in areas other than the skin). This staging may involve PET/CT scans, bone marrow biopsy, and/or bloodwork depending on the features seen in an individual patient.



TREATMENT OPTIONS

Upon diagnosis, appropriate staging work-up should be done to make sure that the disease is limited to the skin. In general, this includes routine laboratory tests and whole-body imaging studies. Bone marrow biopsies are not recommended for all patients with indolent CBCLs.

Treatment selection for CBCL depends on the type of CBCL, and whether the skin lesion is solitary/regional or multifocal (widespread). Regular skin examinations are very important, especially for indolent CBCLs, as skin is the most common site of new lesions. General laboratory tests may also be done, but imaging is not needed unless there is a concern of systemic (widespread) disease.

Indolent CBCLs usually remain indolent and, should relapse occur, relapse in the skin. Very rarely, indolent CBCLs relapse as systemic disease, most commonly in regional lymph nodes. In extremely rare cases, indolent CBCLs can transform into more aggressive types of lymphoma.

Table 1 below includes treatment options for both indolent and aggressive CBCL.

Table 1. Common Treatment Options in CBCL

Indolent CBCL		
First-Line Treatment	Solitary ^a or Regional ^b Disease	<p>Preferred</p> <ul style="list-style-type: none"> • Local ISRT and/or excision <p>Other therapies</p> <ul style="list-style-type: none"> • Observation/active surveillance • Skin-directed therapies • Intralesional steroids
	Generalized Skin-Only Disease ^c	<ul style="list-style-type: none"> • Observation/active surveillance • Skin-directed therapies • Local ISRT • Intralesional steroids • Rituximab (Rituxan) • Other systemic therapy (such as R-CHOP or chlorambucil [Leukeran])
Second-Line Treatment		Choose one of the first-line therapies above that has not been used.
Aggressive CBCL (CDLBCL, Leg-Type)		
First-Line Treatment	<ul style="list-style-type: none"> • Systemic chemotherapy ± rituximab (Rituxan) ± radiation therapy 	
Second-Line Treatment	<ul style="list-style-type: none"> • Chemotherapy ± rituximab (Rituxan) • Ibrutinib (Imbruvica) • Lenalidomide (Revlimid) • Radiation therapy and/or immunotherapy 	

CBCL = cutaneous B-cell lymphoma; CDLBCL = primary cutaneous diffuse large B-cell lymphoma; ISRT = involved-site radiation therapy; R-CHOP = rituximab, cyclophosphamide, doxorubicin, vincristine, prednisone.

^aOne lesion; ^bMultiple lesions limited to one body region or two adjacent regions; ^cMultiple lesions in ≥ 2 body regions not adjacent to each other.

TREATMENTS UNDER INVESTIGATION

Many treatments are currently being tested in clinical trials for patients with both newly diagnosed and relapsed/refractory B-cell lymphomas. These include oral chemotherapy drugs (azacitidine/CC-486), immune checkpoint inhibitors like nivolumab (Opdivo), Bruton's tyrosine kinase inhibitors like zanubrutinib (Brukinsa), monoclonal antibodies (varlilumab), and chimeric antigen receptor (CAR) T-cell therapy. It is critical to remember that today's scientific research is continuously evolving. Treatment options may change as new treatments are discovered and current treatments are improved. Therefore, it is important that patients check with their physician or with the Lymphoma Research Foundation (LRF) for any treatment updates that may have recently emerged.

CLINICAL TRIALS

Clinical trials are crucial in identifying effective drugs and determining optimal doses for patients with lymphoma. Patients interested in participating in a clinical trial should

view the *Understanding Clinical Trials* fact sheet on LRF's website (visit lymphoma.org/publications), and the *Clinical Trials Search Request Form* at lymphoma.org, talk to their physician, or contact the LRF Helpline for an individualized clinical trial search by calling (800) 500-9976 or emailing helpline@lymphoma.org.

FOLLOW UP

Patients with lymphoma should have regular visits with a physician who is familiar with their medical history and the treatments they have received. Medical tests (such as blood tests, computed tomography [CT] scans, and positron emission tomography [PET] scans) may be required at various times during remission (disappearance of signs and symptoms) to evaluate the need for additional treatment.

Patients and their caregivers are encouraged to keep copies of all medical records and test results as well as information on the types, amounts, and duration of all treatments received. This documentation will be important for keeping track of any side effects resulting from treatment or potential disease recurrences.

LRF's award-winning mobile app *Focus On Lymphoma* (lymphoma.org/mobileapp) and the *Lymphoma Care Plan* (lymphoma.org/publications) can help manage this documentation.

LRF'S HELPLINE AND LYMPHOMA SUPPORT NETWORK

A lymphoma diagnosis often triggers a range of feelings and concerns. In addition, cancer treatment can cause physical discomfort. The LRF Helpline staff members are available to answer your general questions about a lymphoma diagnosis and treatment information, as well as provide individual support and referrals to you and your loved ones. Callers may request the services of a language interpreter. A part of the Helpline is LRF's one-to-one peer support programs, Lymphoma Support Network. This program connects patients and caregivers with volunteers who have experience with CBCL, similar treatments, or challenges, for mutual emotional support and encouragement. Patients and loved ones may find this useful whether the patient is newly diagnosed, in treatment, or in remission.

MOBILE APP

Focus On Lymphoma is the first mobile application (app) that provides patients and caregivers comprehensive content based on their lymphoma subtype, including ALCL, and tools to help manage their lymphoma such as, keep track of medications and blood work, track symptoms, and document treatment side effects. The *Focus On Lymphoma* mobile app is available for download for iOS and Android devices in the Apple App Store and Google Play. To learn more about any of these resources, visit our website at lymphoma.org, or contact the LRF Helpline at **(800) 500-9976** or helpline@lymphoma.org.

LYMPHOMA CARE PLAN

Keeping your information in one location can help you feel more organized and in control. This also makes it easier to find information pertaining to your care and saves valuable time. LRF offers a Lymphoma Care Plan as a resource for patients and their caregivers. LRF's Lymphoma Care Plan document organizes information on your health care team, treatment regimen, and follow-up care. You can also keep track of health screenings and any symptoms you experience to discuss with your health care provider during future appointments. The Lymphoma Care Plan document can be accessed by visiting lymphoma.org/publications.

Resources

LRF offers a wide range of free resources that address treatment options, the latest research advances, and ways to cope with all aspects of lymphoma and CBCL. LRF also provides many educational activities, including our in-person meetings, and webinars for people with lymphoma. For more information about any of these resources, visit our websites at lymphoma.org/CBCL or lymphoma.org, or contact the LRF Helpline at **(800) 500-9976** or helpline@lymphoma.org.

Para información en Español, por favor visite lymphoma.org/es. (For Information in Spanish please visit lymphoma.org/es.)

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