

MEDICAL POLICY

POLICY TITLE	SURGICAL TREATMENTS FOR BREAST CANCER RELATED LYMPHEDEMA
POLICY NUMBER	MP 1.161
CLINICAL BENEFIT	☐ MINIMIZE SAFETY RISK OR CONCERN. ☒ MINIMIZE HARMFUL OR INEFFECTIVE INTERVENTIONS. ☐ ASSURE APPROPRIATE LEVEL OF CARE. ☐ ASSURE APPROPRIATE DURATION OF SERVICE FOR INTERVENTIONS. ☐ ASSURE THAT RECOMMENDED MEDICAL PREREQUISITES HAVE BEEN MET. ☐ ASSURE APPROPRIATE SITE OF TREATMENT OR SERVICE.
Effective date:	10/1/2026

POLICY

Lymphatic physiologic microsurgery to treat lymphedema (including, but not limited to, lymphatico-lymphatic bypass, lymphovenous bypass, lymphaticovenous anastomosis, autologous lymph node transplantation, and vascularized lymph node transfer) in individuals who have been treated for breast cancer is considered **investigational**. There is insufficient evidence to support a general conclusion concerning the health outcomes or benefits associated with these procedures.

Lymphatic physiologic microsurgery performed during nodal dissection or breast reconstruction to prevent lymphedema (including, but not limited to, the Lymphatic Microsurgical Preventing Healing Approach) in individuals who are being treated for breast cancer is considered **investigational**. There is insufficient evidence to support a general conclusion concerning the health outcomes or benefits associated with these procedures.

Cross-Reference:

MP 6.013 Compression Devices for Treatment of Lymphedema and Peripheral Disease

PRODUCT VARIATIONS

This policy is only applicable to certain programs and products administered by Capital Blue Cross and subject to benefit variations. Please see additional information below.

FEP PPO - Refer to FEP Medical Policy Manual. The FEP Medical Policy manual can be found at: <https://www.fepblue.org/benefit-plans/medical-policies-and-utilization-management-guidelines/medical-policies>.

DESCRIPTION/BACKGROUND

LYMPHEDEMA

Lymphedema is an accumulation of fluid due to disruption of lymphatic drainage. Lymphedema can be caused by congenital or inherited abnormalities in the lymphatic system (primary

MEDICAL POLICY

POLICY TITLE	SURGICAL TREATMENTS FOR BREAST CANCER RELATED LYMPHEDEMA
POLICY NUMBER	MP 1.161

lymphedema) but is most often caused by acquired damage to the lymphatic system (secondary lymphedema).

Diagnosis and Staging

A diagnosis of secondary lymphedema is based on history (e.g., cancer treatment, trauma) and physical examination (localized, progressive edema and asymmetric limb measurements) when other causes of edema can be excluded. Imaging, such as magnetic resonance imaging, computed tomography, ultrasound, or lymphoscintigraphy, may be used to differentiate lymphedema from other causes of edema in diagnostically challenging cases.

Table 1 lists International Society of Lymphology guidance for staging lymphedema based on "softness" or "firmness" of the limb and the changes with an elevation of the limb.

Table 1. Recommendations for Staging Lymphedema

Stage	Description
Stage 0 (subclinical)	Swelling is not evident, and most patients are asymptomatic despite impaired lymphatic transport
Stage I (mild)	Accumulation of fluid that subsides (usually within 24 hours) with limb elevation; soft edema that may pit, without evidence of dermal fibrosis
Stage II (moderate)	Does not resolve with limb elevation alone; limb may no longer pit on examination
Stage III (severe)	Lymphostatic elephantiasis; pitting can be absent; skin has trophic changes

Breast Cancer-Related Lymphedema

Breast cancer treatment is one of the most common causes of secondary lymphedema. Both the surgical removal of lymph nodes and radiotherapy are associated with development of lymphedema in patients with breast cancer.

In a systematic review of 72 studies (N=29,612 women), DiSipio et al (2013) reported that approximately 1 in 5 women who survive breast cancer will develop arm lymphedema. Reviewers reported that risk factors for development of lymphedema that had a strong level of evidence were extensive surgery (i.e., axillary-lymph-node dissection, greater number of lymph nodes dissected, mastectomy) and being overweight or obese. The incidence of breast cancer-related lymphedema was found by DiSipio et al as well as other authors to be up to 30% at 3 years after treatment.

Studies have also suggested that Black breast cancer survivors are nearly 2.2 times more likely to develop breast cancer-related lymphedema compared to White breast cancer survivors. These observations may be linked to racial disparities with regards to access to treatment and the types of treatments received. Black women are more likely than White women to undergo axillary lymph node dissection, which is associated with greater morbidity than the less invasive sentinel lymph node biopsy. While this may be explained in part by Black individuals having a higher likelihood

MEDICAL POLICY

POLICY TITLE	SURGICAL TREATMENTS FOR BREAST CANCER RELATED LYMPHEDEMA
POLICY NUMBER	MP 1.161

of being diagnosed with more aggressive tumors, there is evidence that even when adjusting for stage and grade of tumors, Black women are more likely to undergo axillary lymph node dissection, putting Black women at greater risk of breast cancer-related lymphedema. Additionally, Black breast cancer survivors, on average, have higher body mass indexes than White breast cancer survivors, which could contribute to development of lymphedema in this setting as well.

Management and Treatment

Early and ongoing treatment of lymphedema is necessary. Conservative therapy may consist of several features depending on the severity of the lymphedema. Patients are educated on the importance of self-care including hygiene practices to prevent infection, maintaining ideal body weight through diet and exercise, and limb elevation. Compression therapy consists of repeatedly applying padding and bandages or compression garments. Manual lymphatic drainage is a light pressure massage performed by trained physical therapists or by patients designed to move fluid from obstructed areas into functioning lymph vessels and lymph nodes. Complete decongestive therapy is a multiphase treatment program involving all of the previously mentioned conservative treatment components at different intensities. Pneumatic compression pumps may also be considered as an adjunct to conservative therapy or as an alternative to self-manual lymphatic drainage in patients who have difficulty performing self-manual lymphatic drainage. In patients with more advanced lymphedema after fat deposition and tissue fibrosis has occurred, palliative surgery using reductive techniques such as liposuction may be performed.

Regulatory Status

Physiologic microsurgery for lymphedema is a surgical procedure and, as such, is not subject to regulation by the U.S. Food and Drug Administration.

RATIONALE

For individuals who have breast cancer-related secondary lymphedema who receive physiologic microsurgery to treat lymphedema along with continued conservative therapy, the evidence includes randomized controlled trials (RCTs), observational studies, and systematic reviews. Relevant outcomes are symptoms, morbid events, functional outcomes, health status measures, quality of life, resource utilization, and treatment-related morbidity. Several physiologic microsurgeries have been developed; examples include lymphaticovenular anastomosis (LVA) and vascularized lymph node transfer (VLNT). Two recent systematic reviews have examined microsurgical interventions for lymphedema, especially LVA and VLNT. Both reviews emphasize the need for higher-quality, standardized research to better assess surgical efficacy in lymphedema treatment. An ongoing RCT of LVA was identified, but analyses of comparative outcomes between groups are limited at this time. One RCT of VLNT with 36 participants has been conducted. However, these studies are not adequate for determining the comparative efficacy of physiologic microsurgery versus conservative treatment or decongestive therapy, or the comparative efficacy of different microsurgery techniques. An ongoing multi-center international RCT and the upcoming Cochrane Review address the need for high-quality evidence to compare the efficacy of microsurgery compared to complex physical decongestive therapy for chronic BCRL. This trial is expected to provide robust evidence on the benefits of combining

MEDICAL POLICY

POLICY TITLE	SURGICAL TREATMENTS FOR BREAST CANCER RELATED LYMPHEDEMA
POLICY NUMBER	MP 1.161

microsurgery with CDT compared to CDT alone. The Cochrane Review will synthesize existing and future research to offer a comprehensive understanding of the current evidence, informing clinical practice and guiding future research directions in this field. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

For individuals who are undergoing lymphadenectomy for breast cancer who receive physiologic microsurgery to prevent lymphedema, the evidence includes a RCT, an ongoing RCT, observational studies, and systematic reviews. Relevant outcomes are symptoms, change in disease status, morbid events, quality of life, and treatment-related morbidity. Lymphatic Microsurgical Preventing Healing Approach (LYMPHA) is a preventive lymphaticovenular anastomosis performed during nodal dissection. Two recent systematic reviews have examined microsurgical interventions for lymphedema prevention. These reviews show that immediate lymphatic reconstruction has a protective effect on breast cancer-related lymphedema rates in patients undergoing autologous lymph node transplantation. However, a notable absence of rigorous clinical trials and studies with extended follow-up limits the strength of these findings. The risk of bias assessment underscores this concern; selection and reporting bias remain prevalent across much of the current literature. One RCT including 46 women has been conducted. The trial reported that lymphedema developed in 4% of women in the LYMPHA group and 30% in the control group by 18 months of follow-up. However, because the cumulative incidence of lymphedema after breast cancer treatment approximates 30% at 3 years, longer follow-up is needed to assess the durability of the procedure. The trial methods of randomization and allocation concealment were not described and there was no blinding, potentially introducing bias. The remaining evidence consists of uncontrolled studies and systematic reviews of these studies. An ongoing RCT indicated improved lymphedema at 24 months (n=40) with immediate lymphatic reconstruction compared with controls (9.5% vs. 32%; p=.014), but conclusions based on this RCT are pending final analysis. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

DISCLAIMER

Capital Blue Cross' medical policies are used to determine coverage for specific medical technologies, procedures, equipment, and services. These medical policies do not constitute medical advice and are subject to change as permitted by law or applicable clinical evidence from independent treatment guidelines. Treating providers are solely responsible for medical advice and treatment of members. These policies are not a guarantee of coverage or payment. Payment of claims is subject to a determination regarding the member's benefit program and eligibility on the date of service, and a determination that the services are medically necessary and appropriate. Final processing of a claim is based upon the terms of contract that applies to the members' benefit program, including benefit limitations and exclusions. If a provider or a member has a question concerning this medical policy, please contact Capital Blue Cross' Provider Services or Member

MEDICAL POLICY

POLICY TITLE	SURGICAL TREATMENTS FOR BREAST CANCER RELATED LYMPHEDEMA
POLICY NUMBER	MP 1.161

CODING INFORMATION

Note: This list of codes may not be all-inclusive, and codes are subject to change at any time. The identification of a code in this section does not denote coverage as coverage is determined by the terms of member benefit information. In addition, not all covered services are eligible for separate reimbursement.

Considered investigational for lymphatic physiologic microsurgery and therefore not covered.

Procedure Codes							
38999	1019T	1081T	1082T				

REFERENCES

1. International Society of Lymphology Executive Committee. *The Diagnosis and Treatment of Peripheral Lymphedema: 2020 Consensus Document of the International Society of Lymphology*. 2020; <https://isl.arizona.edu/sites/default/files/2021-09/Consensus%20Document-SM.pdf>. Accessed July 24, 2024.
2. DiSipio T, Rye S, Newman B, et al. Incidence of unilateral arm lymphoedema after breast cancer: a systematic review and meta-analysis. *Lancet Oncol*. May 2013; 14(6): 500-15. PMID 23540561
3. Ribeiro Pereira ACP, Koifman RJ, Bergmann A. Incidence and risk factors of lymphedema after breast cancer treatment: 10 years of follow-up. *Breast*. Dec 2017; 36: 67-73. PMID 28992556
4. Zou L, Liu FH, Shen PP, et al. The incidence and risk factors of related lymphedema for breast cancer survivors post-operation: a 2-year follow-up prospective cohort study. *Breast Cancer*. May 2018; 25(3): 309-314. PMID 29397555
5. Dean LT, Kumar A, Kim T, et al. Race or Resource? BMI, Race, and Other Social Factors as Risk Factors for Interlimb Differences among Overweight Breast Cancer Survivors with Lymphedema. *J Obes*. 2016; 2016: 8241710. PMID 27433356
6. Pusic AL, Cemal Y, Albornoz C, et al. Quality of life among breast cancer patients with lymphedema: a systematic review of patient-reported outcome instruments and outcomes. *J Cancer Surviv*. Mar 2013; 7(1): 83-92. PMID 23212603
7. Coriddi M, Dayan J, Sobti N, et al. Systematic Review of Patient-Reported Outcomes following Surgical Treatment of Lymphedema. *Cancers (Basel)*. Feb 29 2020; 12(3). PMID 32121343
8. Leung N, Furniss D, Giele H. Modern surgical management of breast cancer therapy related upper limb and breast lymphoedema. *Maturitas*. Apr 2015; 80(4): 384-90. PMID 25747119
9. Meuli JN, Guiotto M, Elmers J, et al. Outcomes after microsurgical treatment of lymphedema: a systematic review and meta-analysis. *Int J Surg*. May 01 2023; 109(5): 1360-1372. PMID 37057889

MEDICAL POLICY

POLICY TITLE	SURGICAL TREATMENTS FOR BREAST CANCER RELATED LYMPHEDEMA
POLICY NUMBER	MP 1.161

10. Lilja C, Madsen CB, Damsgaard TE, et al. Surgical treatment algorithm for breast cancer lymphedema-a systematic review. *Gland Surg.* May 30 2024; 13(5): 722-748. PMID 38845835
11. Haas Y, Williams OP, Masia J, et al. Microsurgical versus complex physical decongestive therapy for chronic breast cancer-related lymphoedema. *Cochrane Database Syst Rev.* Feb 13 2025; 2(2): CD016019. PMID 39945379
12. Kappos EA, Haas Y, Schulz A, et al. The LYMPH trial: comparing microsurgical with conservative treatment for chronic breast cancer-associated lymphoedema - study protocol of a pragmatic randomised international multicentre superiority trial. *BMJ Open.* Feb 17 2025; 15(2): e090662. PMID 39961719
13. Jonis YMJ, Wolfs JAGN, Hummelink S, et al. The 6 month interim analysis of a randomized controlled trial assessing the quality of life in patients with breast cancer related lymphedema undergoing lymphaticovenous anastomosis vs. conservative therapy. *Sci Rep.* Jan 26 2024; 14(1): 2238. PMID 38278856
14. Dionyssiou D, Demiri E, Tsimponis A, et al. A randomized control study of treating secondary stage II breast cancer-related lymphoedema with free lymph node transfer. *Breast Cancer Res Treat.* Feb 2016; 156(1): 73-9. PMID 26895326
15. Cemal Y, Pusic A, Mehrara BJ. Preventative measures for lymphedema: separating fact from fiction. *J Am Coll Surg.* Oct 2011; 213(4): 543-51. PMID 21802319
16. Armer JM. The problem of post-breast cancer lymphedema: impact and measurement issues. *Cancer Invest.* 2005; 23(1): 76-83. PMID 15779870
17. Armer JM, Stewart BR. A comparison of four diagnostic criteria for lymphedema in a post-breast cancer population. *Lymphat Res Biol.* 2005; 3(4): 208-17. PMID 16379589
18. Silva AC, Franco-Mesa C, Vieira ACP, et al. Immediate lymphovenous anastomosis is effective in preventing breast cancer-related lymphedema: A systematic review and meta-analysis. *J Plast Reconstr Aesthet Surg.* Jul 2025; 106: 114-124. PMID 40403351
19. Wong AW, Sim NHS, Zhan SJ, et al. The efficacy of immediate lymphatic reconstruction after axillary lymph node dissection - A meta-analysis. *Eur J Surg Oncol.* Jan 2025; 51(1): 109377. PMID 39547134
20. Boccardo FM, Casabona F, Friedman D, et al. Surgical prevention of arm lymphedema after breast cancer treatment. *Ann Surg Oncol.* Sep 2011; 18(9): 2500-5. PMID 21369739
21. Coriddi M, Dayan J, Bloomfield E, et al. Efficacy of Immediate Lymphatic Reconstruction to Decrease Incidence of Breast Cancer-related Lymphedema: Preliminary Results of Randomized Controlled Trial. *Ann Surg.* Oct 01 2023; 278(4): 630-637. PMID 37314177
22. Jakub JW, Boughey JC, Hieken TJ, et al. Lymphedema Rates Following Axillary Lymph Node Dissection With and Without Immediate Lymphatic Reconstruction: A Prospective Trial. *Ann Surg Oncol.* Oct 2024; 31(11): 7349-7359. PMID 38955992
23. Chang DW, Dayan J, Greene AK, et al. Surgical Treatment of Lymphedema: A Systematic Review and Meta-Analysis of Controlled Trials. Results of a Consensus Conference. *Plast Reconstr Surg.* Apr 01 2021; 147(4): 975-993. PMID 33761519
24. McLaughlin SA, DeSnyder SM, Klimberg S, et al. Considerations for Clinicians in the Diagnosis, Prevention, and Treatment of Breast Cancer-Related Lymphedema,

MEDICAL POLICY

POLICY TITLE	SURGICAL TREATMENTS FOR BREAST CANCER RELATED LYMPHEDEMA
POLICY NUMBER	MP 1.161

- Recommendations from an Expert Panel: Part 2: Preventive and Therapeutic Options. Ann Surg Oncol. Oct 2017; 24(10): 2827-2835. PMID 28766218*
25. *The American Society of Breast Surgeons. Clinical Consensus (2022). Axillary Management for Patients With In-Situ and Invasive Breast Cancer: A Concise Overview. Accessed August 18, 2025.*
 26. *Executive Committee of the International Society of Lymphology. The Diagnosis and Treatment of Peripheral Lymphedema: 2023 Consensus Document of The International Society of Lymphology. Lymphology. 2023; 56(4): 133-151. PMID 39207406*
 27. *National Comprehensive Cancer Network (NCCN). NCCN Clinical Practice Guidelines in Oncology: Survivorship. Version 2.2025. https://www.nccn.org/professionals/physician_gls/pdf/survivorship.pdf. Accessed August 26, 2025.*
 28. *National Comprehensive Cancer Network (NCCN). NCCN Clinical Practice Guidelines in Oncology: Breast Cancer. Version 4.2025. https://www.nccn.org/professionals/physician_gls/pdf/breast.pdf. Accessed August 25, 2025.*
 29. *National Lymphedema Network Medical Advisory Committee. The Diagnosis and Treatment of Lymphedema. Position Statement of the National Lymphedema Network 2011; <https://lymphnet.org/position-papers>. Accessed July 24, 2024.*
 30. *National Lymphedema Network. Surgical Treatment Options (2025).*

POLICY HISTORY

MP 1.161	07/24/2024 Major Review. New policy adoption.
	07/24/2025 Consensus Review. No changes to coding.
	12/11/2025 Administrative Update. Added new code 1019T eff 01/01/2026.
	04/21/2026 Consensus Review. Editorial refinements to policy statement; no change to intent. Updated rationale and references. No changes to procedure coding.
	09/02/2026 Administrative Update. Added 1081T-1082T as part of New Code Process. Eff date 10/01/2026

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