

Evidence Discussion (ONC 27.7)

Lymphoblastic Lymphoma

Initial diagnosis

Patients with lymphoblastic lymphoma should undergo a diagnostic-quality contrasted CT of the neck, chest, abdomen, and pelvis, or a PET/CT fusion study to define areas of involvement and assess disease bulk, which has prognostic implications. There is no clear benefit to combining contrasted, diagnostic CTs with a PET/CT fusion study for this condition. (1, 2)

An MRI of the brain is supported only for symptoms of CNS disease, as it has not been shown to improve the detection of CNS involvement compared with CSF cytology alone. (2)

Restaging

CT is supported at end of induction only for those with known bulky disease at diagnosis. If a residual mass is present, it can be re-evaluated at each new therapy phase. There is no clear evidence that more frequent imaging changes management. (2)

The role of PET/CT is unclear. Guidelines support PET/CT only if there is a residual mass greater than or equal to 8mm and if a clear management decision depends on the results.

Residual masses that are not metabolically active are considered a complete response. Further imaging is not supported once a negative PET/CT is obtained, even if a residual mass remains. (3,4)

Surveillance

Advanced imaging is not supported for surveillance in lymphoblastic lymphoma, as there is no evidence of improved survival when recurrence is detected by imaging rather than clinical and laboratory assessment. (1,2,5)

References

1. Zelenetz A, Gordon L, Abramson J, et al. Referenced with permission from the NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for B-Cell Lymphomas Version 1.2024 — January 18, 2024. All rights reserved. Accessed [March 12, 2024]. To view the most recent and complete version of the guideline, go online to NCCN.org.
2. Bijal S, Jain N, May W, et al. Referenced with permission from the NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Acute Lymphoblastic Leukemia Version 4.2023 — February 5, 2024. All rights reserved. Accessed [April 19, 2024]. To view the most recent and complete version of the guideline, go online to NCCN.org
3. Cheson BD, Fisher RI, Barrington SF, Cavalli F, Schwartz LH, Zucca E, Lister TA; Alliance, Australasian Leukaemia and Lymphoma Group; Eastern Cooperative Oncology Group; European Mantle Cell Lymphoma Consortium; Italian Lymphoma Foundation; European Organisation for Research; Treatment of Cancer/Dutch Hemato-Oncology Group; Grupo Español de Médula Ósea; German High-Grade Lymphoma Study Group; German Hodgkin's

Study Group; Japanese Lymphoma Study Group; Lymphoma Study Association; NCIC Clinical Trials Group; Nordic Lymphoma Study Group; Southwest Oncology Group; United Kingdom National Cancer Research Institute. Recommendations for initial evaluation, staging, and response assessment of Hodgkin and non-Hodgkin lymphoma: the Lugano classification. *J Clin Oncol*. 2014 Sep 20;32(27):3059-68. doi: 10.1200/JCO.2013.54.8800. PMID: 25113753; PMCID: PMC4979083.

4. Barrington SF, Mikhaeel NG, Kostakoglu L, Meignan M, Hutchings M, Müller SP, Schwartz LH, Zucca E, Fisher RI, Trotman J, Hoekstra OS, Hicks RJ, O'Doherty MJ, Hustinx R, Biggi A, Cheson BD. Role of imaging in the staging and response assessment of lymphoma: consensus of the International Conference on Malignant Lymphomas Imaging Working Group. *J Clin Oncol*. 2014 Sep 20;32(27):3048-58. doi: 10.1200/JCO.2013.53.5229. Erratum in: *J Clin Oncol*. 2016 Jul 20;34(21):2562. PMID: 25113771; PMCID: PMC5015423.
5. Lynch RC, Zelenetz AD, Armitage JO, Carson KR. Surveillance imaging for lymphoma: pros and cons. *Am Soc Clin Oncol Educ Book*. 2014:e388-95. doi: 10.14694/EdBook_AM.2014.34.e388. PMID: 24857129.
6. ASCO. (2021). Choosing Wisely. Retrieved from <https://old-prod.asco.org/news-initiatives/current-initiatives/cancer-care-initiatives/value-cancer-care/choosing-wisely>