Survivorship - Non-Small Cell Lung Cancer (NSCLC) THE UNIVERSITY OF TEXAS MDAnderson Cancer Center

Making Cancer History®

Disclaimer: This algorithm has been developed for MD Anderson using a multidisciplinary approach considering circumstances particular to MD Anderson's specific patient population, services and structure, and clinical information. This is not intended to replace the independent medical or professional judgment of physicians or other health care providers in the context of individual clinical circumstances to determine a patient's care. This algorithm should not be used to treat pregnant women.



Copyright 2025 The University of Texas MD Anderson Cancer Center

Approved by the Executive Committee of the Medical Staff on 04/15/2025

Page 1 of 6

MDAnderson Survivorship - Non-Small Cell Lung Cancer (NSCLC)

Page 2 of 6

Making Cancer History®

Cancer Center

Disclaimer: This algorithm has been developed for MD Anderson using a multidisciplinary approach considering circumstances particular to MD Anderson's specific patient population, services and structure, and clinical information. This is not intended to replace the independent medical or professional judgment of physicians or other health care providers in the context of individual clinical circumstances to determine a patient's care. This algorithm should not be used to treat pregnant women.



Department of Clinical Effectiveness V5 Approved by the Executive Committee of the Medical Staff on 04/15/2025



¹See Physical Activity, Nutrition, Obesity Screening and Management, and Tobacco Cessation Treatment algorithms; ongoing reassessment of lifestyle risks should be a part of routine clinical practice

² Includes breast, cervical, colorectal, liver, pancreatic, prostate, and skin cancer screening

³Based on American Society of Clinical Oncology (ASCO) guidelines

Survivorship - Non-Small Cell Lung Cancer (NSCLC)

Making Cancer History®

THE UNIVERSITY OF TEXAS

MDAnderson Cancer Center

Disclaimer: This algorithm has been developed for MD Anderson using a multidisciplinary approach considering circumstances particular to MD Anderson's specific patient population, services and structure, and clinical information. This is not intended to replace the independent medical or professional judgment of physicians or other health care providers in the context of individual clinical circumstances to determine a patient's care. This algorithm should not be used to treat pregnant women.

SUGGESTED READINGS

Boulanger, M., Mitchell, C., Zhong, J., & Hsu, M. (2022). Financial toxicity in lung cancer. Frontiers in Oncology, 12:1004102. doi:10.3389/fonc.2022.1004102

- Brooks, E. D., Sun, B., Feng, L., Verma, V., Zhao, L., Gomez, D. R., ... Chang, J. Y. (2018). Association of long-term outcomes and survival with multidisciplinary salvage treatment for local and regional recurrence after stereotactic ablative radiotherapy for early-stage lung cancer. *JAMA Network Open*, 1(4), e181390. doi:10.1001/jamanetworkopen.2018.1390
- Calman, L., Beaver, K., Hind, D., Lorigan, P., Roberts, C., & Lloyd-Jones, M. (2011). Survival benefits from follow-up of patients with lung cancer: A systematic review and meta-analysis. Journal of Thoracic Oncology, 6(12), 1993-2004. doi:10.1097/JTO.0b013e31822b01a1
- Claiborne, P. M., Fowler, C. S., & Vaporciyan, A. A. (2012). Follow-up of patients with resected thoracic malignancies. *Thoracic Surgery Clinics*, 22(1), 123-131. doi:10.1016/j.thorsurg.2011.08.011
- Clark, M. M., Novotny, P. J., Patten, C. A., Rausch, S. M., Garces, Y. I., Jatoi, A., ... Yang, P. (2008). Motivational readiness for physical activity and quality of life in long-term lung cancer survivors. *Lung Cancer*, *61*(1), 117-122. doi:10.1016/j.lungcan.2007.12.012
- Endo, C., Sakurada, A., Notsuda, H., Noda, M., Hoshikawa, Y., Okada, Y., & Kondo, T. (2012). Results of long-term follow-up of patients with completely resected non-small cell lung cancer. *The Annals of Thoracic Surgery*, 93(4), 1061-1068. doi:10.1016/j.athoracsur.2012.01.004
- Feinstein, M. B., Krebs, P., Coups, E. J., Park, B. J., Steingart, R. M., Burkhalter, J., ... Ostroff, J. S. (2010). Current dyspnea among long-term survivors of early-stage non-small cell lung cancer. Journal of Thoracic Oncology, 5(8), 1221-1226. doi:10.1097/JTO.0b013e3181df61c8
- Gooneratne, N. S., Dean, G. E., Rogers, A. E., Nkwuo, J. E., Coyne, J. C., & Kaiser, L. R. (2007). Sleep and quality of life in long-term lung cancer survivors. *Lung Cancer*, 58(3), 403-410. doi:10.1016/j.lungcan.2007.07.011
- Haro, A., Yano, T., Kohno, M., Yoshida, T., Okamoto, T., & Maehara, Y. (2012). Ground-glass opacity lesions on computed tomography during postoperative surveillance for primary non-small cell lung cancer. *Lung Cancer*, *76*(1), 56-60. doi: 10.1016/j.lungcan.2011.09.002
- Hubbard, M. O., Fu, P., Margevicius, S., Dowlati, A., & Linden, P. A. (2012). Five-year survival does not equal cure in non-small cell lung cancer: A Surveillance, Epidemiology, and End Results based analysis of variables affecting 10-to 18-year survival. *The Journal of Thoracic and Cardiovascular Surgery*, 143(6), 1307-1313. doi:10.1016/j.jtcvs.2012.01.078
- Kamboj, M., Bohlke, K., Baptiste, D. M., Dunleavy, K., Fueger, A., Jones, L., ... Kohn, E. C. (2024). Vaccination of adults with cancer: ASCO guideline. *Journal of Clinical Oncology*, 42(14), 1699-1721. doi:10.1200/JCO.24.00032
- Krebs, P., Coups, E. J., Feinstein, M. B., Burkhalter, J. E., Steingart, R. M., Logue, A., ... Ostroff, J. S. (2012). Health behaviors of early-stage non-small cell lung cancer survivors. *Journal of Cancer Survivorship*, 6(1), 37-44. doi:10.1007/s11764-011-0191-9
- Lee, C. B., Stinchcombe, T. E., Moore, D. T., Morris, D. E., Hayes, D. N., Halle, J., ... Socinski, M. A. (2009). Late complications of high-dose (≥ 66 Gy) thoracic conformal radiation therapy in combined modality trials in unresectable stage III non-small cell lung cancer. *Journal of Thoracic Oncology*, *4*(1), 74-79. doi:10.1097/JTO.0b013e3181915028

Page 4 of 6

Survivorship - Non-Small Cell Lung Cancer (NSCLC)

Making Cancer History®

THE UNIVERSITY OF TEXAS

MDAnderson Cancer Center

Disclaimer: This algorithm has been developed for MD Anderson using a multidisciplinary approach considering circumstances particular to MD Anderson's specific patient population, services and structure, and clinical information. This is not intended to replace the independent medical or professional judgment of physicians or other health care providers in the context of individual clinical circumstances to determine a patient's care. This algorithm should not be used to treat pregnant women.

SUGGESTED READINGS - continued

MD Anderson Institutional Policy #CLN1202 - Advance Care Planning Policy. Advance Care Planning (ACP) Conversation Workflow (ATT1925)

National Comprehensive Cancer Network. (2024). Non-small cell lung cancer (NCCN Guideline Version 9.2024). https://www.nccn.org/professionals/physician_gls/pdf/nscl.pdf

- Nes, L. S., Liu, H., Patten, C. A., Rausch, S. M., Sloan, J. A., Garces, Y. I., ... Clark, M. M. (2012). Physical activity and quality of life in long-term lung cancer survivors. *Lung Cancer*, 77(3), 611-616. doi:10.1016/j.lungcan.2012.05.096
- Ostroff, J. S., Krebs, P., Coups, E. J., Burkhalter, J. E., Feinstein, M. B., Steingart, R. M., ... Park, B. J. (2011). Health-related quality of life among early-stage, non-small cell, lung cancer survivors. *Lung Cancer*, *71*(1), 103-108. doi:10.1016/j.lungcan.2010.04.011
- Rueth, N. M., Parsons, H. M., Habermann, E. B., Groth, S. S., Virnig, B. A., Tuttle, T. M., ... D'Cunha, J. (2011). The long-term impact of surgical complications after resection of stage I nonsmall cell lung cancer: A population-based survival analysis. *Annals of Surgery*, 254(2), 368-374. doi:10.1097/SLA.0b013e31822150fe
- Schneider, B. J., Ismaila, N., Aerts, J., Chiles, C., Daly, M. E., Detterbeck ... Altorki, N. (2020). Lung Cancer Surveillance After Definitive Curative-Intent Therapy: ASCO Guideline. *Journal of Clinical Oncology*, 38(7), 753–766. doi:10.1200/JCO.19.02748
- Singh, B., Spence, R., Steele, M. L., Hayes, S., & Toohey, K. (2020). Exercise for individuals with lung cancer: A systematic review and meta-analysis of adverse events, feasibility, and effectiveness. *Seminars in Oncology Nursing*, *36*(5), 151076. doi:10.1016/j.soncn.2020.151076
- Sun, B., Brooks, E. D., Komaki, R. U., Liao, Z., Jeter, M. D., McAleer, M. F., ... Chang, J. Y. (2017). 7-year follow-up after stereotactic ablative radiotherapy for patients with stage I non-small cell lung cancer: Results of a phase 2 clinical trial. *Cancer*, 123(16), 3031-3039. doi:10.1002/cncr.30693
- Vayr, F., Savall, F., Bigay-Game, L., Soulat, J. M., Chouaid, C., & Herin, F. (2019). Lung cancer survivors and employment: A systematic review. Lung Cancer, 131(2019), 31–39. doi:10.1016/j.lungcan.2019.03.010
- Westeel, V. (2011). Early detection: 17 IN Follow-up of the patient after curative treatment. Lung Cancer, 71(Suppl.2), S10-S11. doi:10.1016/S0169-5002(11)70154-4
- Yang, P., Cheville, A. L., Wampfler, J. A., Garces, Y. I., Jatoi, A., Clark, M. M., ... Sloan, J. A. (2012). Quality of life and symptom burden among long-term lung cancer survivors. *Journal of Thoracic Oncology*, 7(1), 64-70. doi:10.1097/JTO.0b013e3182397b3e
- Yi, H., Ou-Yang, X., Hong, Q., Liu, L., Liu, M., Wang, Y., ... Mao, Y. (2025). Patient-reported outcomes in lung cancer surgery: A narrative review. Asian Journal of Surgery, 48(1), 40-48. doi:10.1016/j.asjsur.2024.07.304
- Yun, Y. H., Kim, Y. A., Min, Y. H., Chang, Y. J., Lee, J., Kim, M. S., ... Zo, J. I. (2012). Health-related quality of life in disease-free survivors of surgically treated lung cancer compared with the general population. *Annals of Surgery*, 255(5), 1000-1007. doi:10.1097/SLA.0b013e31824f1e9e

Page 5 of 6



Survivorship - Non-Small Cell Lung Cancer (NSCLC)

Page 6 of 6

Making Cancer History®

Disclaimer: This algorithm has been developed for MD Anderson using a multidisciplinary approach considering circumstances particular to MD Anderson's specific patient population, services and structure, and clinical information. This is not intended to replace the independent medical or professional judgment of physicians or other health care providers in the context of individual clinical circumstances to determine a patient's care. This algorithm should not be used to treat pregnant women.

DEVELOPMENT CREDITS

This survivorship algorithm is based on majority expert opinion of the Thoracic Cancer Survivorship workgroup at the University of Texas MD Anderson Cancer Center. It was developed using a multidisciplinary approach that included input from the following:

Core Development Team Leads

Ara Vaporciyan, MD (Thoracic & Cardiovascular Surgery)

Workgroup Members

Brett W. Carter, MD, CPE, CPPS (Thoracic Imaging) Joe Chang, MD, MS, PhD (Thoracic Radiation Oncology) Olga N. Fleckenstein, BS[•] Danielle Fournier, MSN, RN, APRN, AGPCNP-BC (Thoracic & Cardiovascular Surgery) Katherine Gilmore, BA, MPH (Cancer Prevention) John Heymach, MD, PhD (Thoracic/Head & Neck Medical Oncology) Susan Knippel, DNP, APRN, FNP-C (Thoracic & Cardiovascular Surgery) Johnny Rollins, MSN, APRN, ANP-C (Cancer Survivorship) Hannah Warr, MSN, RN, CPHON[•]

* Clinical Effectiveness Development Team