

DAFTAR PUSTAKA

- Achrol, A. S., Rennert, R. C., Anders, C., Soffiatti, R., Ahluwalia, M. S., Nayak, L., Peters, S., Arvold, N. D., Harsh, G. R., Steeg, P. S., & Chang, S. D. (2019). Brain metastases. *Nature Reviews Disease Primers*, 5(1), 1–26. <https://doi.org/10.1038/s41572-018-0055-y>
- Achrol, A. S., Rennert, R. C., Anders, C., Soffiatti, R., Ahluwalia, M. S., Nayak, L., et al. (2019) 'Brain metastases', *Nature Reviews Disease Primers*. Springer US, 5(1), pp. 1–26. doi: 10.1038/s41572-018-0055-y.
- Agarwal, J. P., Chakraborty, S., Laskar, S. G., Mummudi, N., Patil, V. M., Prabhash, K., et al. (2017) 'Prognostic value of a patient-reported functional score versus physicianreported Karnofsky Performance Status Score in brain metastases', *Ecancermedicalsecience*, 11. doi: 10.3332/ecancer.2017.779.
- Agustini, Sheila et al. Penilaian Kualitas Hidup Pada Pasien Tumor Otak. *Neurona* Januari 2011; Vol. 28 No. 2.
- Akyuz, E., Polat, A. K., Eroglu, E., Kullu, I., Angelopoulou, E. and Paudel, Y. N. (2021) 'Revisiting the role of neurotransmitters in epilepsy: An updated review', *Life Sciences*. Elsevier Inc, 265, p. 118826. doi: 10.1016/j.lfs.2020.118826.
- Alexandru D., Bota DA., dan Linskey ME., Epidemiology of central nervous system metastases. *Prog Neurolog Surg*. (2012). Vol 25:13-23
- Arnold SM, Patchell RA. Diagnosis and management of brain metastases. *Hematol. Oncol. Clin. North Am.* (2001).15(6), 1085–1107
- Atkins MB, Gollob JA, Sosman JA, McDermott DF, Tutin L, Sorokin P, et al. A phase II pilot trial of concurrent biochemotherapy with cisplatin, vinblastine, temozolomide, interleukin 2, and IFN-alpha 2B in patients with metastatic melanoma. *Clin Cancer Res* 2002;8(10):3075–81.
- Auperin A, Arriagada R, Pignon JP, Le Pechoux C, Gregor A, Stephens RJ, et al. Prophylactic cranial irradiation for patients with small-cell lung cancer in complete remission. Prophylactic Cranial Irradiation Overview Collaborative Group [see comments]. *N Engl J Med* 1999;341(7):476–84.
- Avril MF, Aamdal S, Grob JJ, Hauschild A, Mohr P, Bonerandi JJ, et al. Fotemustine compared with dacarbazine in patients with disseminated malignant melanoma: A phase III study. *J Clin Oncol* 2004;22:1118–25.
- Bailleux, C., Eberst, L. and Bachelot, T. (2021) 'Treatment strategies for breast cancer brain metastases', *British Journal of Cancer*. Springer US, 124(1), pp. 142–155. doi: 10.1038/s41416-020-01175-y.

- Barnholtz-Sloan JS, Sloan AE, Davis FG, Vignneau FD, Lai P, Sawaya RE. Incidence proportions of brain metastases in patients diagnosed (1973 to 2001) in the Metropolitan Detroit Cancer Surveillance System. *J Clin Oncol* 2004;22(14):2865–72.
- Barta, J. A., Powell, C. A. and Wisnivesky, J. P. (2019) ‘Global epidemiology of lung cancer’, *Annals of Global Health*, 85(1), pp. 1–16. doi: 10.5334/aogh.2419.
- Becco, P., Gallo, S., Poletto, S., Frascione, M. P. M., Crotto, L., Zaccagna, A., et al. (2020) ‘Melanoma brain metastases in the era of target therapies: An overview’, *Cancers*, 12(6), pp. 1–20. doi: 10.3390/cancers12061640.
- Berger, A., Strauss, I., Ben Moshe, S., Corn, B. W., Limon, D., Shtraus, N., Shahar, T., & Kanner, A. A. (2018). Neurocognitive evaluation of brain metastases patients treated with post-resection stereotactic radiosurgery: a prospective single arm clinical trial. *Journal of Neuro-Oncology*, 140(2), 307–315. <https://doi.org/10.1007/s11060-018-2954-x>
- Boire, A., Brastianos, P. K., Garzia, L., & Valiente, M. (2020). Brain metastasis. *Nature Reviews Cancer*, 20(1), 4–11. <https://doi.org/10.1038/s41568-019-0220-y>
- Boland, J. W., Allgar, V., Boland, E. G., Kaasa, S., Hjermstad, M. J., & Johnson, M. J. (2019). Predictors and trajectory of performance status in patients with advanced cancer: A secondary data analysis of the international European Palliative Care Cancer Symptom study. *Palliative Medicine*, 33(2), 206–212. <https://doi.org/10.1177/0269216318811011>
- Boland, J. W., Allgar, V., Boland, E. G., Kaasa, S., Hjermstad, M. J. and Johnson, M. J. (2019) ‘Predictors and trajectory of performance status in patients with advanced cancer: A secondary data analysis of the international European Palliative Care Cancer Symptom study’, *Palliative Medicine*, 33(2), pp. 206–212. doi: 10.1177/0269216318811011.
- Brown, D. R., Lanciano, R., Heal, C., Hanlon, A., Yang, J., Feng, J., et al. (2017) ‘The effect of whole-brain radiation (WBI) and Karnofsky performance status (KPS) on survival of patients receiving stereotactic radiosurgery (SRS) for second brain metastatic event’, *Journal of Radiation Oncology*. *Journal of Radiation Oncology*, 6(1), pp. 31–37. doi: 10.1007/s13566-016-0287-y.
- Cacho-Díaz, B., García-Botello, D. R., Wegman-Ostrosky, T., Reyes-Soto, G., Ortiz-Sánchez, E. and Herrera-Montalvo, L. A. (2020) ‘Tumor microenvironment differences between primary tumor and brain metastases’, *Journal of Translational Medicine*. *BioMed Central*, 18(1), pp. 1–12. doi: 10.1186/s12967-019-02189-8.
- Cagney DN, Martin AM, Catalano PJ, et al. Implications of screening for brain metastases in patients with breast cancer and non-small cell lung cancer. *JAMA Oncol*. 2018;4(7):1001–1003

- Cagney DN, Martin AM, Catalano PJ, et al. Implications of screening for brain metastases in patients with breast cancer and non-small cell lung cancer. *JAMA Oncol.* 2018;4(7):1001–1003
- Cagney, D. N., Martin, A. M., Catalano, P. J., Redig, A. J., Lin, N. U., Lee, E. Q., Wen, P. Y., Dunn, I. F., Bi, W. L., Weiss, S. E., Haas-Kogan, D. A., Alexander, B. M., & Aizer, A. A. (2017). Incidence and prognosis of patients with brain metastases at diagnosis of systemic malignancy: A population-based study. *Neuro-Oncology*, 19(11), 1511–1521. <https://doi.org/10.1093/neuonc/nox077>
- Cazzaniga ME, Cordani N, Capici S, Cogliati V, Riva F, Cerrito MG. Metronomic Chemotherapy. *Cancers*.2021;13(9):2236.<https://doi.org/10.3390/cancers13092236>
- Ceresoli GL, Cappuzzo F, Gregorc V, Bartolini S, Crino L, Villa E. Gefitinib in patients with brain metastases from non-small-cell lung cancer: a prospective trial. *Ann Oncol* 2004;15(7):1042–7.
- Chang EL, Wefel JS, Maor MH, Hassenbusch SJ, Mahajan A, Lang FF, et al. A pilot study of neurocognitive function in patients with one to three new brain metastases initially treated with stereotactic radiosurgery alone. *Neurosurgery* 2007;60:277–83
- Cheng, Y., Zhang, T. and Xu, Q. (2021) ‘Therapeutic advances in non-small cell lung cancer: Focus on clinical development of targeted therapy and immunotherapy’, *MedComm*, 2(4), pp. 692–729. doi: 10.1002/mco2.105.
- Chernov, M. F., Nakaya, K., Izawa, M., Hayashi, M., Usuba, Y., Kato, K., et al. (2007) ‘Outcome After Radiosurgery for Brain Metastases in Patients With Low Karnofsky Performance Scale (KPS) Scores’, *International Journal of Radiation Oncology Biology Physics*, 67(5), pp. 1492–1498. doi: 10.1016/j.ijrobp.2006.11.023.
- Chevallier, M., Borgeaud, M., Addeo, A. and Friedlaender, A. (2021) ‘Oncogenic driver mutations in non-small cell lung cancer: Past, present and future’, *World Journal of Clinical Oncology*, 12(4), pp. 217–237. doi: 10.5306/wjco.v12.i4.217.
- Chi, A. and Komaki, R. (2010) ‘Treatment of brain metastasis from lung cancer’, *Cancers*, 2(4), pp. 2100–2137. doi: 10.3390/cancers2042100.
- Diaz, M. J., Mark, I., Rodriguez, D., Gelman, B., Tran, J. T., Kleinberg, G., et al. (2023) ‘Melanoma Brain Metastases: A Systematic Review of Opportunities for Earlier Detection, Diagnosis, and Treatment’, *Life*, 13(3), pp. 1–14. doi: 10.3390/life13030828.
- Dómine, M., Moran, T., Isla, D., Martí, J. L., Sullivan, I., Provencio, M., et al. (2020) ‘SEOM clinical guidelines for the treatment of small-cell lung cancer (SCLC) (2019)’, *Clinical and Translational Oncology*. Springer International Publishing, 22(2), pp. 245–255. doi: 10.1007/s12094-020-02295-w.

- Dong, K., Liu, L., Yu, Z., Wu, D., Zhang, Q., Huang, X., et al. (2019) 'Brain metastases from lung cancer with neuropsychiatric symptoms as the first symptoms', *Translational Lung Cancer Research*, 8(5), pp. 682–691. doi: 10.21037/tlcr.2019.10.02.
- Dziadziuszko R, Ardizzoni A, Postmus PE, Smit EF, Price A, Debruyne C, et al. Temozolomide in patients with advanced non-small cell lung cancer with and without brain metastases. a phase II study of the EORTC Lung Cancer Group (08965). *Eur J Cancer* 2003;39(9):1271–6.
- Elbanna, M., Chowdhury, N. N., Rhome, R., & Fishel, M. L. (2021). Clinical and Preclinical Outcomes of Combining Targeted Therapy With Radiotherapy. *Frontiers in Oncology*, 11(October), 1–22. <https://doi.org/10.3389/fonc.2021.749496>
- Enrique, G.-V., Irving, S.-R., Ricardo, B.-I., Jesus, F.-L., Alan, R.-M., Inigo, V. A. A., Luis, B.-L., Allan, H. C., Graciela, P.-M. A., Liliana, N.-R., & Roque, E.-R. (2019). Diagnosis and management of brain metastases: an updated review from a radiation oncology perspective. *Journal of Cancer Metastasis and Treatment*, 2019. <https://doi.org/10.20517/2394-4722.2019.20>
- Eroglu, Z., Topcu, T. O., Yu, H. M., & Margolin, K. A. (2022). How I treat brain metastases of melanoma. *ESMO Open*, 7(6), 1–4. <https://doi.org/10.1016/j.esmoop.2022.100598>
- Ettinger, D. S., Wood, D. E., Aisner, D. L., Akerley, W., Bauman, J. R., Bharat, A., et al. (2020) 'NCCN Clinical Guidelines in Oncology: Non-Small Cell Lung Cancer', National Comprehensive Cancer Network, 3, pp. 1–240.
- Fares, J., Kanojia, D., Rashidi, A., Ulasov, I., & Lesniak, M. S. (2020). Landscape of combination therapy trials in breast cancer brain metastasis. *International Journal of Cancer*, 147(7), 1939–1952. <https://doi.org/10.1002/ijc.32937>
- Feng, S. H. and Yang, S. T. (2019) 'The new 8th tnm staging system of lung cancer and its potential imaging interpretation pitfalls and limitations with ct image demonstrations', *Diagnostic and Interventional Radiology*, 25(4), pp. 270–279. doi: 10.5152/dir.2019.18458.
- Fidler IJ, Yano S, Zhang RD, Fujimaki T, Bucana CD. The seed and soil hypothesis: vascularization and brain metastases. *Lancet Oncol.* 3(1), 53–57 (2002).
- Freeman, M., Ennis, M. and Jerzak, K. J. (2022) 'Karnofsky Performance Status (KPS) ≤ 60 Is Strongly Associated With Shorter Brain-Specific Progression-Free Survival Among Patients With Metastatic Breast Cancer With Brain Metastases', *Frontiers in Oncology*, 12(July), pp. 1–7. doi: 10.3389/fonc.2022.867462.
- Fujiwara K, Kiura K, Ueoka H et al. Dramatic effect of ZD1839 ('Iressa') in a patient with advanced non-small-cell lung cancer and poor performance status. *Lung Cancer* 40(1), 73–76 (2003).

- Gondhowiardjo, S., Christina, N., Ganapati, N. P. D., Hawariy, S., Radityamurti, F., Jayalie, V. F., et al. (2021) 'Five-Year Cancer Epidemiology at the National Referral Hospital: Hospital-Based Cancer Registry Data in Indonesia', *JCO Global Oncology*, (7), pp. 190–203. doi: 10.1200/go.20.00155.
- Gonzalez-Angulo AM, Cristofanilli M, Strom EA, Buzdar AU, Kau SW, Broglio KR, et al. Central nervous system metastases in patients with high-risk breast carcinoma after multimodality treatment. *Cancer* 2004;101(8):1760–6.
- Gress, D. M., Edge, S. B., Greene, F. L., Washington, M. K., Asare, E. A., Brierley, J. D., et al. (2017) 'Principles of Cancer Staging', *American College of Surgeons*, pp. 3–31. doi: 10.1007/978-3-319-40618-3.
- Gupta, S., Singh, S., Choppy, A., Nair, S., Ahuja, R., Kusum, K., Joseph, D., Arora, R., Gupta, A., & Gupta, M. (2022). Analysis of prognostic factors in patients with brain metastases affecting survival. *Journal of the Egyptian National Cancer Institute*, 34(1), 1–7. <https://doi.org/10.1186/s43046-022-00146-z>
- Gupta, S., Singh, S., Choppy, A., Nair, S., Ahuja, R., Kusum, K., et al. (2022) 'Analysis of prognostic factors in patients with brain metastases affecting survival', *Journal of the Egyptian National Cancer Institute*. Springer Berlin Heidelberg, 34(1), pp. 1–7. doi: 10.1186/s43046-022-00146-z.
- Gutzmer, R., Vordermark, D., Hassel, J. C., Krex, D., Wendl, C., Schadendorf, D., Sickmann, T., Rieken, S., Pukrop, T., Höller, C., Eigentler, T. K., & Meier, F. (2020). Melanoma brain metastases – Interdisciplinary management recommendations 2020. *Cancer Treatment Reviews*, 89(July), 102083. <https://doi.org/10.1016/j.ctrv.2020.102083>
- Gutzmer, R., Vordermark, D., Hassel, J. C., Krex, D., Wendl, C., Schadendorf, D., et al. (2020) 'Melanoma brain metastases – Interdisciplinary management recommendations 2020', *Cancer Treatment Reviews*. Elsevier, 89(July), p. 102083. doi: 10.1016/j.ctrv.2020.102083.
- Hall WA, Djalilian HR, Nussbaum ES, et al. (2000) Long-term survival with metastatic cancer to the brain. *Med Oncol* 17:279–286
- Handayani Putri, D., Yulianti Bisri, D., Rasman, M., & Chasnak Saleh, S. (2019). Kemoterapi pada Pasien Operasi Tumor Otak Metastasis: Apa Implikasi Anestesinya? *Jurnal Neuroanestesi Indonesia*, 8(1), 50–59. <https://doi.org/10.24244/jni.vol8i1.204>
- Hofer, S., & Brada, M. (2010). Brain metastases. In *Blue Books of Neurology* (Vol. 36, pp. 284-296). Butterworth-Heinemann.
- Hong, Y., Park, S. and Lee, M. K. (2022) 'The prognosis of non-small cell lung cancer patients according to endobronchial metastatic lesion', *Scientific Reports*. Nature Publishing Group UK, 12(1), pp. 1–11. doi: 10.1038/s41598-022-17918-1.

- Hwu WJ, Krown SE, Menell JH, Panageas KS, Merrell J, Lamb LA, et al. Phase II study of temozolomide plus thalidomide for the treatment of metastatic melanoma. *J Clin Oncol* 2003;21(17):3351–6.
- Internò, V., Sergi, M. C., Metta, M. E., Guida, M., Trerotoli, P., Strippoli, S., et al. (2023) ‘Melanoma Brain Metastases: A Retrospective Analysis of Prognostic Factors and Efficacy of Multimodal Therapies’, *Cancers*, 15(5), pp. 1–12. doi: 10.3390/cancers15051542.
- Jeong, S., Poudyal, S., Klagges, S., Kuhnt, T., Papsdorf, K., Hambsch, P., Wach, J., Güresir, E., Nägler, F., Rühle, A., Nicolay, N. H., & Seidel, C. (2023). Diabetes Mellitus Is a Strong Independent Negative Prognostic Factor in Patients with Brain Metastases Treated with Radiotherapy. *Cancers*, 15(19). <https://doi.org/10.3390/cancers15194845>
- Käsmann L, Taugner J, Eze C, Roengvoraphoj O, Dantes M, Gennen K, Karin M, Petrukhnov O, Tufman A, Belka C, Manapov F. Performance Status and Its Changes Predict Outcome for Patients With Inoperable Stage III NSCLC Undergoing Multimodal Treatment. *Anticancer Res.* 2019 Sep;39(9):5077–5081. doi: 10.21873/anticancer.13701. PMID: 31519618.
- Kelly, C. M. and Shahrokni, A. (2016) ‘Moving beyond Karnofsky and ECOG Performance Status Assessments with New Technologies’, *Journal of Oncology*, 2016, pp. 1–13. doi: 10.1155/2016/6186543.
- Khalsa, S. S. S., Chinn, M., Krucoff, M., & Sherman, J. H. (2013). The role of stereotactic radiosurgery for multiple brain metastases in stable systemic disease: A review of the literature. *Acta Neurochirurgica*, 155(7), 1321–1327. <https://doi.org/10.1007/s00701-013-1701-5>
- Kim, J. S. and Kang, E. J. (2020) ‘Targeted Therapy for Non-Small Cell Lung Cancer’, *The Korean Association of Internal Medicine*, 95(2), pp. 78–88.
- Kimmell, K. T., Lasota, E., Weil, R. J., & Marko, N. F. (2015). Comparative Effectiveness Analysis of Treatment Options for Single Brain Metastasis. *World Neurosurgery*, 84(5), 1316–1332. <https://doi.org/10.1016/j.wneu.2015.06.021>
- Kohutek, Z. A., Yamada, Y., Chan, T. A., Brennan, C. W., Tabar, V., Gutin, P. H., Jonathan Yang, T., Rosenblum, M. K., Ballangrud, Å., Young, R. J., Zhang, Z., & Beal, K. (2015). Long-term risk of radionecrosis and imaging changes after stereotactic radiosurgery for brain metastases. *Journal of Neuro-Oncology*, 125(1), 149–156. <https://doi.org/10.1007/s11060-015-1881-3>
- Koide, Y., Nagai, N., Miyauchi, R., Kitagawa, T., Aoyama, T., Shimizu, H., Tachibana, H., & Kodaira, T. (2022). Radiotherapy or systemic therapy versus combined therapy in patients with brain metastases: a propensity-score matched study. *Journal of Neuro-Oncology*, 160(1), 191–200. <https://doi.org/10.1007/s11060-022-04132-2>

- Komite Penanggulangan Kanker Nasional (2015) Panduan Penatalaksanaan Kanker Paru, Kementerian Kesehatan Republik Indonesia. Available at: <http://kanker.kemkes.go.id/guidelines/PPKProstat.pdf>.
- Kotecha, R., Vogel, S., Suh, J. H., Barnett, G. H., Murphy, E. S., Reddy, C. A., Parsons, M., Vogelbaum, M. A., Angelov, L., Mohammadi, A. M., Stevens, G. H. J., Peereboom, D. M., Ahluwalia, M. S., & Chao, S. T. (2016). A cure is possible: a study of 10-year survivors of brain metastases. *Journal of Neuro-Oncology*, 129(3), 545–555. <https://doi.org/10.1007/s11060-016-2208-8>
- Kristensen CA, Kristjansen PEG, Hansen HH. Systemic chemotherapy of brain metastases from small cell lung cancer. *J Clin Oncol* 1992;10:1498–502.
- Krüger, S., Mottaghy, F. M., Buck, A. K., Maschke, S., Kley, H., Frechen, D., et al. (2011) ‘Brain Metastasis in Lung Cancer’, *Nuclear Medicine*, 50(3), pp. 101–106. doi: 10.3413/Nukmed-0338-10-07.
- Lagerwaard FJ, Levendag PC, Nowak PJ, Eijkenboom WM, Hanssens PE, Schmitz PI. Identification of prognostic factors in patients with brain metastases: a review of 1292 patients. *Int J Radiat Oncol Biol Phys* 1999;43(4):795–803.
- Lamba N, Cagney DN, Brigell RH, et al. Neurosurgical resection and stereotactic radiation versus stereotactic radiation alone in patients with a single or solitary brain metastasis. *World Neurosurg*. 2019;122:e1557–e1561.
- Lamba N, Catalano PJ, Cagney DN, et al. Seizures among patients with brain metastases: a population- and institutional-level analysis. *Neurology*. 2021;96(8):e1237–50 /
- Le Rhun, É., Guckenberger, M., Smits, M., Dummer, R., Bachelot, T., Sahm, F., Galldiks, N., de Azambuja, E., Berghoff, A.S., Metellus, P., Peters, S., Hong, Y., Winkler, F., Schadendorf, D., van den Bent, M.J., Seoane, J., Stahel, R., Minniti, G., Wesseling, P., Weller, M., & Preusser, M. (2021). EANO-ESMO Clinical Practice Guidelines for diagnosis, treatment and follow-up of patients with brain metastasis from solid tumours. *Annals of oncology : official journal of the European Society for Medical Oncology*.
- Lehrer EJ, Peterson JL, Zaorsky NG, et al. Single versus multifraction stereotactic radiosurgery for large brain metastases: an international meta-analysis of 24 trials. *Int J Radiat Oncol Biol Phys*. 2019;103(3): 618-630.
- Leone JP dan Leone BA. Breast cancer brain metastases : the last frontier. *Exp HematolOncol* (2015) 4:33
- Leone, J. P. and Leone, B. A. (2015) ‘Breast cancer brain metastases: The last frontier’, *Experimental Hematology and Oncology*. BioMed Central, 4(1), pp. 1–10. doi: 10.1186/s40164-015-0028-8.
- Leone, J. P., Haraldsson, B., Mott, S. L., McDowell, B. D., & Chrischilles, E. A. (2019). Treatment patterns and survival of elderly patients with breast cancer brain metastases. *American Journal of Clinical Oncology: Cancer*

- Clinical Trials*, 42(1), 60–66.
<https://doi.org/10.1097/COC.0000000000000477>
- Lim, J. U. and Yeo, C. D. (2022) ‘Update on adjuvant therapy in completely resected NSCLC patients’, *Thoracic Cancer*, 13(3), pp. 277–283. doi: 10.1111/1759-7714.14277.
- Lin, R. J., Green, D. L., & Shah, G. L. (2018). Therapeutic Anticoagulation in Patients with Primary Brain Tumors or Secondary Brain Metastasis. *The Oncologist*, 23(4), 468–473. <https://doi.org/10.1634/theoncologist.2017-0274>
- Lin, X., & DeAngelis, L. M. (2015). Treatment of brain metastases. *Journal of Clinical Oncology*, 33(30), 3475–3484. <https://doi.org/10.1200/JCO.2015.60.9503>
- Loeffler, J. S. (2023). Overview of the Treatment of Brain Metastases. UpToDate, 1–33. [https://uptodate.upc.elogim.com/contents/overview-of-the-treatment-of-brain-metastases?sectionName=Single brain metastasis&search=brain metastasis&topicRef=114697&anchor=H3963741857&source=see_link#H26%0Ahttp://www.pubmedcentral.nih.gov/articlerender.fcgi](https://uptodate.upc.elogim.com/contents/overview-of-the-treatment-of-brain-metastases?sectionName=Single+brain+metastasis&search=brain+metastasis&topicRef=114697&anchor=H3963741857&source=see_link#H26%0Ahttp://www.pubmedcentral.nih.gov/articlerender.fcgi)
- Majeed, U., Manochakian, R., Zhao, Y. and Lou, Y. (2021) ‘Targeted therapy in advanced non-small cell lung cancer: current advances and future trends’, *Journal of Hematology and Oncology. BioMed Central*, 14(1), pp. 1–20. doi: 10.1186/s13045-021-01121-2.
- McClelland, S., Agrawal, N., Elbanna, M. F., Shiue, K., Bartlett, G. K., Lautenschlaeger, T., et al. (2020) ‘Baseline Karnofsky performance status is independently predictive of death within 30 days of intracranial radiation therapy completion for metastatic disease’, *Reports of Practical Oncology and Radiotherapy. Greater Poland Cancer Centre*, 25(4), pp. 698–700. doi: 10.1016/j.rpor.2020.02.014.
- Michael, C. W. (2018) ‘Lung carcinoma’, *Serous Effusions: Etiology, Diagnosis, Prognosis and Therapy*, pp. 29–48. doi: 10.1007/978-3-319-76478-8_2.
- Middleton MR, Grob JJ, Aaronson N, Fierlbeck G, Tilgen W, Seiter S, et al. Randomized phase III study of temozolomide versus dacarbazine in the treatment of patients with advanced metastatic malignant melanoma. *J Clin Oncol* 2000;18(1):158–66.
- Mitchell DK, Kwon HJ, Kubica PA, Huff WX, O'Regan R, Dey M. Brain metastases: An update on the multi-disciplinary approach of clinical management. *Neurochirurgie*. 2022 Jan;68(1):69-85. doi: 10.1016/j.neuchi.2021.04.001. Epub 2021 Apr 14. PMID: 33864773; PMCID: PMC8514593.
- Moraes, F. Y., Winter, J., Atenafu, E. G., Dasgupta, A., Raziee, H., Coolens, C., Millar, B. A., Laperriere, N., Patel, M., Bernstein, M., Kongkham, P., Zadeh, G., Conrad, T., Chung, C., Berlin, A., & Shultz, D. B. (2019).

Outcomes following stereotactic radiosurgery for small to medium-sized brain metastases are exceptionally dependent upon tumor size and prescribed dose. *Neuro-Oncology*, 21(2), 242–251. <https://doi.org/10.1093/neuonc/noj159>

Myall, N. J., Yu, H., Soltys, S. G., Wakelee, H. A. and Pollom, E. (2021) ‘Management of brain metastases in lung cancer: evolving roles for radiation and systemic treatment in the era of targeted and immune therapies’, *Neuro-Oncology Advances*, 3(5), pp. 52–62.

Myall, N. J., Yu, H., Soltys, S. G., Wakelee, H. A., & Pollom, E. (2021). Management of brain metastases in lung cancer: evolving roles for radiation and systemic treatment in the era of targeted and immune therapies. *Neuro-Oncology Advances*, 3(5), 52–62.

Niikura, N., Saji, S., Tokuda, Y. and Iwata, H. (2014) ‘Brain metastases in breast cancer’, *Japanese Journal of Clinical Oncology*, 44(12), pp. 1133–1140. doi: 10.1093/jjco/hyu156.

Noh T, Walbert T. Chapter 6 - Brain metastasis: clinical manifestations, symptom management, and palliative care. In: Schiff D, van den Bent MJ, eds. *Handbook of Clinical Neurology*. Vol 149. Elsevier; 2018:75–88. <https://pubmed.ncbi.nlm.nih.gov/29307363/>

Nowacka, A., Fajkiel-Madajczyk, A., Ohla, J., Woźniak-Dąbrowska, K., Liss, S., Gryczka, K., Smuczyński, W., Ziółkowska, E., Bożyłow, D., Śniegocki, M., & Wiciński, M. (2023). Current Treatment of Melanoma Brain Metastases. *Cancers*, 15(16), 1–13. <https://doi.org/10.3390/cancers15164088>

Nowacka, A., Fajkiel-Madajczyk, A., Ohla, J., Woźniak-Dąbrowska, K., Liss, S., Gryczka, K., et al. (2023) ‘Current Treatment of Melanoma Brain Metastases’, *Cancers*, 15(16), pp. 1–13. doi: 10.3390/cancers15164088.

Ostrom, Q. T., Wright, C. H., & Barnholtz-Sloan, J. S. (2018). Brain metastases: epidemiology. In *Handbook of Clinical Neurology* (1st ed., Vol. 149). Elsevier B.V. <https://doi.org/10.1016/B978-0-12-811161-1.00002-5>

Partl, R., Richtig, E., Avian, A., Berghold, A. and Kapp, K. S. (2013) ‘Karnofsky performance status and lactate dehydrogenase predict the benefit of palliative whole-brain irradiation in patients with advanced intra- and extracranial metastases from malignant melanoma’, *International Journal of Radiation Oncology Biology Physics*. Elsevier Inc., 85(3), pp. 662–666. doi: 10.1016/j.ijrobp.2012.06.009.

Partl, R., Richtig, E., Avian, A., Berghold, A., & Kapp, K. S. (2013). Karnofsky performance status and lactate dehydrogenase predict the benefit of palliative whole-brain irradiation in patients with advanced intra- and extracranial metastases from malignant melanoma. *International Journal of Radiation Oncology Biology Physics*, 85(3), 662–666. <https://doi.org/10.1016/j.ijrobp.2012.06.009>

- Pesce, G. A., Klingbiel, D., Ribi, K., Zouhair, A., Von Moos, R., Schlaeppli, M., ... & Stupp, R. (2012). Outcome, quality of life and cognitive function of patients with brain metastases from non-small cell lung cancer treated with whole brain radiotherapy combined with gefitinib or temozolomide. A randomised phase II trial of the Swiss Group for Clinical Cancer Research (SAKK 70/03). *European journal of cancer*, 48(3), 377-384.
- Petrelli, F., De Stefani, A., Trevisan, F., Parati, C., Inno, A., Merelli, B., Ghidini, M., Bruschi, L., Vitali, E., Cabiddu, M., Borgonovo, K., Ghilardi, M., Barni, S., & Ghidini, A. (2019). Combination of radiotherapy and immunotherapy for brain metastases: A systematic review and meta-analysis. *Critical Reviews in Oncology/Hematology*, 144(June), 102830. <https://doi.org/10.1016/j.critrevonc.2019.102830>
- Péus D, Newcomb N, Hofer S. Appraisal of the Karnofsky Performance Status and proposal of a simple algorithmic system for its evaluation. *BMC Med Inform Decis Mak*. 2013 Jul 19;13:72. doi: 10.1186/1472-6947-13-72. PMID: 23870327; PMCID: PMC3722041.
- Péus, D., Newcomb, N. and Hofer, S. (2013) 'Appraisal of the Karnofsky Performance Status and proposal of a simple algorithmic system for its evaluation', *BMC Medical Informatics and Decision Making*. *BMC Medical Informatics and Decision Making*, 13(1), p. 1. doi: 10.1186/1472-6947-13-72.
- Péus, D., Newcomb, N., & Hofer, S. (2013). Appraisal of the Karnofsky Performance Status and proposal of a simple algorithmic system for its evaluation. *BMC Medical Informatics and Decision Making*, 13(1), 1. <https://doi.org/10.1186/1472-6947-13-72>
- Pope, W. B. (2018). Brain metastases: neuroimaging. In *Handbook of Clinical Neurology* (1st ed., Vol. 149). Elsevier B.V. <https://doi.org/10.1016/B978-0-12-811161-1.00007-4>
- Postmus PE, Haaxma-Reiche H, Smit EF, Groen HJ, Karnicka H, Lewinski T, et al. Treatment of brain metastases of small-cell lung cancer: comparing teniposide and teniposide with whole-brain radiotherapy—a phase III study of the European Organization for the Research and Treatment of Cancer Lung Cancer Cooperative Group. *J Clin Oncol* 2000;18(19):3400–8.
- Proescholdt, M. A., Schödel, P., Doenitz, C., Pukrop, T., Höhne, J., Schmidt, N. O., & Schebesch, K. M. (2021). The management of brain metastases—systematic review of neurosurgical aspects. *Cancers*, 13(7), 1–17. <https://doi.org/10.3390/cancers13071616>
- Puspitaningtyas, H., Espressivo, A., Hutajulu, S. H., Fuad, A. and Allsop, M. J. (2021) 'Mapping and Visualization of Cancer Research in Indonesia: A Scientometric Analysis', *Cancer Control*, 28, pp. 1–13. doi: 10.1177/10732748211053464.

- Rami-Porta, R., Call, S., Dooms, C., Obiols, C., Sánchez, M., Travis, W. D., et al. (2018) 'Lung cancer staging: A concise update', *European Respiratory Journal*, 51(5), pp. 1–17. doi: 10.1183/13993003.00190-2018.
- Real, A., Allis, S., Girardi, A., Verna, R., Bianco, L. and Redda, M. G. R. (2015) 'Is Karnofsky performance status correlate with better overall survival in palliative conformal whole brain radiotherapy? Our experience', *Indian Journal of Palliative Care*, 21(3), pp. 311–316. doi: 10.4103/0973-1075.164891.
- Real, A., Allis, S., Girardi, A., Verna, R., Bianco, L., & Redda, M. G. R. (2015). Is Karnofsky performance status correlate with better overall survival in palliative conformal whole brain radiotherapy? Our experience. *Indian Journal of Palliative Care*, 21(3), 311–316. <https://doi.org/10.4103/0973-1075.164891>
- Robinet G, Thomas P, Breton JL, Lena H, Gouva S, Dabouis G, et al. Results of a phase III study of early versus delayed whole brain radiotherapy with concurrent cisplatin and vinorelbine combination in inoperable brain metastasis of non-small-cell lung cancer: Groupe Francais de Pneumo-Cancerologie (GFPC) Protocol 95–1. *Ann Oncol* 2001;12(1):59–67.
- Ryken, TC. et al. The role of steroids in the management of brain metastases: a systematic review and evidence- based clinical practice guideline. *J. Neurooncol*;. (2010) 96, 103–114
- Sacks P dan Rahman M. Epidemiology of Brain Metastases. *Neurosurg Clin N Am*. 2020 Oct. 31 (4):481-488
- Sacks, P., & Rahman, M. (2020). Epidemiology of Brain Metastases. *Neurosurgery Clinics of North America*, 31(4), 481–488. <https://doi.org/10.1016/j.nec.2020.06.001>
- Saha, A., Ghosh, S., Roy, C., Choudhury, K., Chakrabarty, B., & Sarkar, R. (2013). Demographic and clinical profile of patients with brain metastases: A retrospective study. *Asian Journal of Neurosurgery*, 8(03), 157–161. <https://doi.org/10.4103/1793-5482.121688>
- Schmoll HJ, Souchoy R, Krege S, Albers P, Beyer J, Kollmannsberger C, et al. European consensus on diagnosis and treatment of germ cell cancer: a report of the European Germ Cell Cancer Consensus Group (EGCCCG). *Ann Oncol* 2004;15(9):1377–99.
- Schouten LJ, Rutten J, Huveneers HA, Twijnstra A. Incidence of brain metastases in a cohort of patients with carcinoma of the breast, colon, kidney and lung and melanoma. *Cancer* 94(10), 2698–2705 (2002).
- Schuette, W. (2004) 'Treatment of brain metastases from lung cancer: Chemotherapy', *Lung Cancer*, 45(SUPPL. 2), pp. 5253–5257. doi: 10.1016/j.lungcan.2004.07.967.

- Schuette, W. (2004). Treatment of brain metastases from lung cancer: Chemotherapy. *Lung Cancer*, 45(SUPPL. 2), 5253–5257. <https://doi.org/10.1016/j.lungcan.2004.07.967>
- Schwer, A. L. and Gaspar, L. E. (2006) ‘Update in the treatment of brain metastases from lung cancer’, *Clinical Lung Cancer*. Elsevier Inc., 8(3), pp. 180–186. doi: 10.3816/CLC.2006.n.045.
- Scott, J. M., Stene, G., Edvardsen, E. and Jones, L. W. (2020) ‘Performance Status in Cancer: Not Broken, but Time for an Upgrade?’, *Journal of Clinical Oncology*, 38(25), pp. 2824–2829. doi: 10.1200/JCO.20.00721.
- Sieglmann-Danieli N, Stein M, Bar-Ziv J. Complete response of brain metastases originating in breast cancer to capecitabine therapy. *Isr Med Assoc J* 2003;5(11):833–4.
- Slimane K, Andre F, Delaloge S, Dunant A, Perez A, Grenier J, et al. Risk factors for brain relapse in patients with metastatic breast cancer. *Ann Oncol* 2004;15(11):1640–4.
- Slotman B, Faivre-Finn C, Kramer G, Rankin E, Snee M, Hatton M, et al. Prophylactic cranial irradiation in extensive small-cell lung cancer. *N Engl J Med* 2007;357(7):664–72.
- Taillibert, S., & Le Rhun. (2015). Epidemiology of brain metastases. *Cancer Radiotherapy*, 19(1), 3–9. <https://doi.org/10.1016/j.canrad.2014.11.001>
- Travis, W. D., Brambilla, E., Nicholson, A. G., Yatabe, Y., Austin, J. H. M., Beasley, M. B., et al. (2015) ‘The 2015 World Health Organization Classification of Lung Tumors: Impact of Genetic, Clinical and Radiologic Advances since the 2004 Classification’, *Journal of Thoracic Oncology*. International Association for the Study of Lung Cancer, 10(9), pp. 1243–1260. doi: 10.1097/JTO.0000000000000630.
- Tumors, L., Travis, W. D., Brambilla, E., Nicholson, A. G., Yatabe, Y., Austin, J. H. M., et al. (2015) ‘The 2015 World Health Organization Classification of’, *Journal of Thoracic Oncology*. International Association for the Study of Lung Cancer, 10(9), pp. 1243–1260. doi: 10.1097/JTO.0000000000000630.
- Verger E, Gil M, Yaya R, Vinolas N, Villa S, Pujol T, et al. Temozolomide and concomitant whole brain radiotherapy in patients with brain metastases: a phase II randomized trial. *Int J Radiat Oncol Biol Phys* 2005;61(1):185–91.
- Vuong, D. A., Rades, D., Vo, S. Q., & Busse, R. (2011). Extracranial metastatic patterns on occurrence of brain metastases. *Journal of Neuro-Oncology*, 105(1), 83–90. <https://doi.org/10.1007/s11060-011-0563-z>
- Wang ML, Yung WK, Royce ME, Schomer DF, Theriault RL. Capecitabine for 5-fluorouracil-resistant brain metastases from breast cancer. *Am J Clin Oncol* 2001;24(4):421–4.

- Wang, Q., *et al.* 2020. *Radioprotective Effect of Flavonoids on Ionizing Radiation Induced Brain Damage*. MDPI. Vol 25 (23), 5719
- Watase, C., Shiino, S., Shimoi, T., Noguchi, E., Kaneda, T., Yamamoto, Y., *et al.* (2021) 'Breast cancer brain metastasis—overview of disease state, treatment options and future perspectives', *Cancers*, 13(5), pp. 1–24. doi: 10.3390/cancers13051078.
- Wen PY, Loeffler JS. Management of brain metastases. *Oncology (Huntingt)* 13(7), 941– 954 (1999)
- West H, Jin JO. Performance Status in Patients With Cancer. *JAMA Oncol.* 2015;1(7):998. doi:10.1001/jamaoncol.2015.3113
- West, H. and Jin, J. O. (2015) 'Performance status in patients with cancer', *JAMA Oncology*, 1(7), p. 998. doi: 10.1001/jamaoncol.2015.3113.
- West, H., & Jin, J. O. (2015). Performance status in patients with cancer. *JAMA Oncology*, 1(7), 998. <https://doi.org/10.1001/jamaoncol.2015.3113>
- Willett, A., Wilkinson, J. Ben, Shah, C. and Mehta, M. P. (2015) 'Management of solitary and multiple brain metastases from breast cancer', *Indian Journal of Medical and Paediatric Oncology*, 36(2), pp. 87–93. doi: 10.4103/0971-5851.158835.
- Willett, A., Wilkinson, J. Ben, Shah, C., & Mehta, M. P. (2015). Management of solitary and multiple brain metastases from breast cancer. *Indian Journal of Medical and Paediatric Oncology*, 36(2), 87–93. <https://doi.org/10.4103/0971-5851.158835>
- Wilson, T. G., Winter, H., Taylor, H. and Herbert, C. (2021) 'CliniCal investigation Treating brain metastases in melanoma: What is the optimal CNS-directed and systemic management?', *Journal of Radiosurgery and SBRT*, 7, p. 2021.
- Winther, R. R., Hjermsstad, M. J., Skovlund, E., Aass, N., Helseth, E., Kaasa, S., Yri, O. E., & Vik-Mo, E. O. (2022). Surgery for brain metastases—impact of the extent of resection. *Acta Neurochirurgica*, 164(10), 2773–2780. <https://doi.org/10.1007/s00701-021-05104-7>
- Wischnewski, V., Maas, R. R., Aruffo, P. G., Soukup, K., Galletti, G., Kornete, M., Galland, S., Fournier, N., Lilja, J., Wirapati, P., Lourenco, J., Scarpa, A., Daniel, R. T., Hottinger, A. F., Brouland, J. P., Losurdo, A., Voulaz, E., Alloisio, M., Hegi, M. E., ... Joyce, J. A. (2023). Phenotypic diversity of T cells in human primary and metastatic brain tumors revealed by multiomic interrogation. *Nature Cancer*, 4(6), 908–924. <https://doi.org/10.1038/s43018-023-00566-3>
- Wischnewski, V., Maas, R. R., Aruffo, P. G., Soukup, K., Galletti, G., Kornete, M., *et al.* (2023) 'Phenotypic diversity of T cells in human primary and metastatic brain tumors revealed by multiomic interrogation', *Nature Cancer*. Springer US, 4(6), pp. 908–924. doi: 10.1038/s43018-023-00566-3.

- Wong, Melisa. Expanding Beyond Maximum Grade: Chemotherapy Toxicity over Time by Age and Performance Status in Advanced Non-Small Cell Lung Cancer in CALGB 9730 (Alliance A151729). *The Oncologist* 2021; 26: e435–e444
- Wu, X., Pu, X. and Lin, J. (2014) ‘Lung Cancer Susceptibility and Risk Assessment Models’, *Lung Cancer: Fourth Edition*, pp. 25–47. doi: 10.1002/9781118468791.ch2.
- Yildiz Çeltek, N., Süren, M., Demir, O. and Okan, İ. (2019) ‘Karnofsky performance scale validity and reliability of Turkish palliative cancer patients’, *Turkish Journal of Medical Sciences*, 49(3), pp. 894–898. doi: 10.3906/sag-1810-44.
- Yildiz Çeltek, N., Süren, M., Demir, O., & Okan, İ. (2019). Karnofsky performance scale validity and reliability of Turkish palliative cancer patients. *Turkish Journal of Medical Sciences*, 49(3), 894–898. <https://doi.org/10.3906/sag-1810-44>
- Yomo, S., & Hayashi, M. (2014). A minimally invasive treatment option for large metastatic brain tumors: Long-term results of two-session Gamma Knife stereotactic radiosurgery. *Radiation Oncology*, 9(1), 1–8. <https://doi.org/10.1186/1748-717X-9-132>
- Zou, K., Sun, P., Huang, H., Zhuo, H., Qie, R., Xie, Y., et al. (2022) ‘Etiology of lung cancer: Evidence from epidemiologic studies’, *Journal of the National Cancer Center*, 2(4), pp. 216–225. doi: 10.1016/j.jncc.2022.09.004.
- Zulfiqar, B., Farooq, A., Kanwal, S. and Asghar, K. (2022) ‘Immunotherapy and targeted therapy for lung cancer: Current status and future perspectives’, *Frontiers in Pharmacology*, 13(November), pp. 1–13. doi: 10.3389/fphar.2022.1035171.