

DAFTAR PUSTAKA

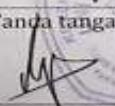
1. Dimitriou N, Felekouras E, Karavokyros I, Alexandrou A, Pikoulis E, Griniatsos J. Neutrophils to lymphocytes ratio as a useful prognosticator for stage II colorectal cancer patients. *BMC Cancer* [Internet]. 2018;18(1):1–14. Available from: [10.1186/s12885-018-5042-x](https://doi.org/10.1186/s12885-018-5042-x)
2. Silva TH, Schilithz AOC, Peres WAF, Murad LB. Neutrophil-lymphocyte ratio and nutritional status are clinically useful in predicting prognosis in colorectal cancer patients. *Nutr Cancer* [Internet]. 2020;72(8):1345–54. Available from: <https://doi.org/10.1080/01635581.2019.1679198>
3. Lee YM, Huh KC. Clinical and Biological Features of Interval Colorectal Cancer. *Clin Endosc* [Internet]. 2017 May 31;50(3):254–60. Available from: <http://www.e-ce.org/journal/view.php?doi=10.5946/ce.2016.115>
4. Candrawati*1 O, , Bambang Eko Broto Hari Utomo2 Imam S. Jurnal kedokteran dan kesehatan. Correl neutrophil-to-lymphocyte ratio, platelet-to-lymphocyte ratio, lymphocyte-to-monocyte ratio carcinoembryonic antigen Lev Color cancer. 2018;82–8.
5. Pedro Lopes J, Cardoso Pereira PM de C, Baltazar Vicente AF dos R, Bernardo A, de Mesquita MF. Estado nutricional de los pacientes de cancer colorrectal. *Nutr Hosp*. 2013;28(2):412–8.
6. Thoresen L, Frykholm G, Lydersen S, Ulveland H, Baracos V, Prado CMM, et al. Nutritional status, cachexia and survival in patients with advanced colorectal carcinoma. Different assessment criteria for nutritional status provide unequal results. *Clin Nutr* [Internet]. 2013;32(1):65–72. Available from: <http://dx.doi.org/10.1016/j.clnu.2012.05.009>
7. de las Peñas R, Majem M, Perez-Altozano J, Virizuela JA, Cancer E, Diz P, et al. SEOM clinical guidelines on nutrition in cancer patients (2018). *Clin Transl Oncol* [Internet]. 2019;21(1):87–93. Available from: <https://doi.org/10.1007/s12094-018-02009-3>
8. Faria SS, Fernandes PC, Silva MJB, Lima VC, Fontes W, Freitas R, et al. The neutrophil-to-lymphocyte ratio: A narrative review. *Ecancermedicalscience*. 2016;10:1–12.
9. Tang H, Li B, Zhang A, Lu W, Xiang C, Dong J. Prognostic significance of neutrophil-to-lymphocyte ratio in colorectal liver metastasis: A systematic review and meta-analysis. *PLoS One*. 2016;11(7):1–15.
10. Kemenkes RI. Panduan Penatalaksanaan Kanker kolorektal. Kementeri Kesehat Republik Indones. 2016;76.

11. Thanikachalam K, Khan G. Colorectal cancer and nutrition. *Nutrients* [Internet]. 2019;11(1). Available from: 10.3390/nu11010164
12. Dekker E, Tanis PJ, Vleugels JLA, Kasi PM, Wallace MB. Colorectal cancer. *Lancet* [Internet]. 2019;394(10207):1467–80. Available from: [http://dx.doi.org/10.1016/S0140-6736\(19\)32319-0](http://dx.doi.org/10.1016/S0140-6736(19)32319-0)
13. Hamza AH, Aglan HA, Ahmend HH. Recent Concepts in the Pathogenesis and Management of Colorectal Cancer. *Avid Sci*. 2017;2–79.
14. Markowitz SD, Bertagnolli MM. Molecular Basis of Colorectal Cancer. *N Engl J Med*. 2009;361(25):2449–60.
15. Cappell MS. Pathophysiology, Clinical Presentation, and Management of Colon Cancer. *Gastroenterol Clin North Am* [Internet]. 2008;37(1):1–24. Available from: 10.1016/j.gtc.2007.12.002
16. Kim AY. Imaging diagnosis of colorectal cancer. *J Korean Med Assoc*. 2010;53(7):562–8.
17. Ahmed M. Colon Cancer: A Clinician’s Perspective in 2019. *Gastroenterol Res* [Internet]. 2020;13(1):1–10. Available from: 10.14740/gr1239
18. Li MX, Liu XM, Zhang XF, Zhang JF, Wang WL, Zhu Y, et al. Prognostic role of neutrophil-to-lymphocyte ratio in colorectal cancer: A systematic review and meta-analysis. *Int J Cancer* [Internet]. 2014;134(10):2403–13. Available from: 10.1002/ijc.28536
19. Palin RP, Devine AT, Hicks G, Burke D. Association of pretreatment neutrophil-lymphocyte ratio and outcome in emergency colorectal cancer care. *Ann R Coll Surg Engl*. 2018;100(4):308–15.
20. Fu K, Pan H. Nutritional status and risk factors for malnutrition in CRC patients undergoing neoadjuvant therapy. *Biomed Res*. 2017;28(10):4406–12.
21. Reber E, Gomes F, Vasiloglou MF, Schuetz P, Stanga Z. Nutritional Risk Screening and Assessment. *J Clin Med* [Internet]. 2019;8(7):1065. Available from: 10.3390/jcm8071065
22. Kaya T, Açıkgöz SB, Yıldırım M, Nalbant A, Altaş AE, Cinemre H. Association between neutrophil-to-lymphocyte ratio and nutritional status in geriatric patients. *J Clin Lab Anal* [Internet]. 2019;33(1):1–6. Available from: 10.1002/jcla.22636
23. Lu C, Gao P, Yang Y, Chen X, Wang L, Yu D, et al. Prognostic evaluation of platelet to lymphocyte ratio in patients with colorectal cancer. *Oncotarget* [Internet]. 2017;8(49):86287–95. Available from: 10.18632/oncotarget.21141
24. Castillo-Martinez L, Castro-Eguiluz D, Copca-Mendoza ET, Perez-Camargo DA, Reyes-Torres CA, Avila EAD, et al. Nutritional assessment tools for the identification of malnutrition and nutritional risk associated with cancer treatment. *Rev Investig Clin* [Internet]. 2018;70(3):121–5. Available from: 10.24875/RIC.18002524

25. Jia W, Yuan L, Ni H, Xu B, Zhao P. Prognostic Value of Platelet-to-Lymphocyte Ratio, Neutrophil-to-Lymphocyte Ratio, and Lymphocyte-to-White Blood Cell Ratio in Colorectal Cancer Patients Who Received Neoadjuvant Chemotherapy. *Technol Cancer Res Treat.* 2021;20:1–10.
26. Pessanha L L, Schmidt Mo M, Ribeiro Ca L, Depolo Ech Á, Fraga Silv NM, Blaser Pet G, et al. Neutrophil-to-lymphocyte Ratio and Nutritional Status in Patients with Cancer in Hospital Admission. *Int J Cancer Res.* 2019;15(1):9–16.
27. Haram A, Boland MR, Kelly ME, Bolger JC, Waldron RM, Kerin MJ. The prognostic value of neutrophil-to-lymphocyte ratio in colorectal cancer: A systematic review. *J Surg Oncol [Internet].* 2017;115(4):470–9. Available from: 10.1002/jso.24523
28. Yann A, Stephane O, Marie A, Pauline T, Elaidi R, Thibault C, et al. Optimal cut-off for neutrophil-to-lymphocyte ratio : Fact or Fantasy ? A prospective cohort study in metastatic cancer patients. *PLoS One.* 2018;4(13):1–13.
29. Mazaki J, Katsumata K, Kasahara K, Tago T, Wada T, Kuwabara H, et al. Neutrophil-to-lymphocyte ratio is a prognostic factor for colon cancer: A propensity score analysis. *BMC Cancer [Internet].* 2020;20(1):1–8. Available from: 10.1186/s12885-020-07429-5
30. Gupta D, Vashi PG, Lammersfeld CA, Braun DP. Role of nutritional status in predicting the length of stay in cancer: A systematic review of the epidemiological literature. *Ann Nutr Metab.* 2011;59(2–4):96–106.
31. Gohil R, Rishi M, Tan B. Pre-operative Serum Albumin and Neutrophil-Lymphocyte Ratio are Associated with Prolonged Hospital Stay Following Colorectal Cancer Surgery. *Br J Med Med Res.* 2014;4(1):481–7.
32. Liu X, Shen Y, Wang H, Ge Q, Fei A, Pan S. Prognostic Significance of Neutrophil-to-Lymphocyte Ratio in Patients with Sepsis: A Prospective Observational Study. *Mediators Inflamm [Internet].* 2016;2016. Available from: 10.1155/2016/8191254
33. Bilgin BC, Kahramanca S, Akin T, Gokce IE, Akin M, Kucukpinar T. Factors influencing cost, length of hospital stay and mortality in Colorectal cancer. *J BUON.* 2015;20(4):1023–9.
34. Rawla P, Sunkara T, Barsouk A. Epidemiology of colorectal cancer: Incidence, mortality, survival, and risk factors. *Prz Gastroenterol [Internet].* 2019;14(2):89–103. Available from: 10.5114/pg.2018.81072
35. Kim SE, Paik HY, Yoon H, Lee JE, Kim N, Sung MK. Sex- and gender-specific disparities in colorectal cancer risk. *World J Gastroenterol.* 2015;21(17):5167–75.
36. Paulus J. Colorectal Cancer Facts and Figures 2020-2022. Amfile:///C/Users/Ali/Downloads/introduction (2).docxerican Cancer Soc. 2020;66(11):1–9.
37. Macciò A, Madeddu C, Gramignano G, Mulas C, Tanca L, Cherchi MC, et al. The role of inflammation, Iron, And nutritional status in cancer-related anemia: Results of a large, Prospective, Observational study. *Haematologica.* 2015;100(1):124–32.

38. Wilson MJ, van Haaren M, Harlaar JJ, Park HC, Bonjer HJ, Jeekel J, et al. Long-term prognostic value of preoperative anemia in patients with colorectal cancer: A systematic review and meta-analysis. *Surg Oncol* [Internet]. 2017;26(1):96–104. Available from: <http://dx.doi.org/10.1016/j.suronc.2017.01.005>
39. Masrul M, Nindrea RD. Dietary fibre protective against colorectal cancer patients in Asia: A meta-analysis. *Open Access Maced J Med Sci*. 2019;7(10):1723–7.
40. Pessanha L L, Schmidt Mo M, Ribeiro Ca L, Depolo Ech Á, Fraga Silv NM, Blaser Pet G, et al. Neutrophil-to-lymphocyte Ratio and Nutritional Status in Patients with Cancer in Hospital Admission. *Int J Cancer Res*. 2018;15(1):9–16.
41. Tan CSY, Read JA, Phan VH, Beale PJ, Peat JK, Clarke SJ. The relationship between nutritional status, inflammatory markers and survival in patients with advanced cancer: a prospective cohort study. *Support Care Cancer*. 2015;23(2):385–91.
42. Lobato LF de C, Ferreira PCA, Wick EC, Kiran RP, Remzi FH, Kalady MF, et al. Risk factors for prolonged length of stay after colorectal surgery. *J Coloproctology*. 2013;33(1):22–7.
43. Downing A, Lansdown M, West RM, Thomas JD, Lawrence G, Forman D. Changes in and predictors of length of stay in hospital after surgery for breast cancer between 1997/98 and 2004/05 in two regions of England: A population-based study. *BMC Health Serv Res*. 2009;9;
44. Fu J, Yang J, Tan Y, Jiang M, Wen F, Huang Y, et al. Young patients (≤ 35 years old) with colorectal cancer have worse outcomes due to more advanced disease: A 30-Year Retrospective Review. *Med (United States)*. 2014;93(23):1–7.
45. Yeo SA, Chew MH, Koh PK, Tang CL. Young colorectal carcinoma patients do not have a poorer prognosis: A comparative review of 2,426 cases. *Tech Coloproctol*. 2013;17(6):653–61.
46. Ménétrier-Caux C, Ray-Coquard I, Blay JY, Caux C. Lymphopenia in Cancer Patients and its Effects on Response to Immunotherapy: An opportunity for combination with Cytokines? *J Immunother Cancer*. 2019;7(1):1–15.
47. Pine JK, Morris E, Hutchins GG, West NP, Jayne DG, Quirke P, et al. Systemic neutrophil-to-lymphocyte ratio in colorectal cancer: The relationship to patient survival, tumour biology and local lymphocytic response to tumour. *Br J Cancer* [Internet]. 2015;113(2):204–11. Available from: <http://dx.doi.org/10.1038/bjc.2015.87>
48. Zhang J, Zhang H-Y, Li J, Shao X-Y, Zhang C-X. The elevated NLR, PLR and PLT may predict the prognosis of patients with colorectal cancer: a systematic review and meta-analysis. *Oncotarget* [Internet]. 2017;8(40):68837–46. Available from: 10.18632/oncotarget.18575
49. Maeda K, Shibutani M, Otani H, Nagahara H, Ikeya T, Iseki Y, et al. Inflammation-based factors and prognosis in patients with colorectal cancer. *World J Gastrointest Oncol*. 2015;7(8):111–7.

LAMPIRAN

<p>KEMENTERIAN PENDIDIKAN DAN KEBUDAYAAN UNIVERSITAS HASANUDDIN FAKULTAS KEDOKTERAN KOMITE ETIK PENELITIAN KESEHATAN RSPTN UNIVERSITAS HASANUDDIN RSUP Dr. WAHIDIN SUDIROHUSODO MAKASSAR Sekretariat : Lantai 2 Gedung Laboratorium Terpadu JL PERINTIS KEMERDEKAAN KAMPUS TAMALANREA KM.10 MAKASSAR 90245. Contact Person: dr. Agussalim Bukhari, M.Med.Phil, Sp.GK, Telp. 081241850858, 0411 5780103, Fax: 0411-581431</p> <p></p>			
REKOMENDASI PERSETUJUAN ETIK Nomor : 197/UN4.6.4.5.31/ PP36/ 2021			
Tanggal: 26 Maret 2021			
Dengan ini Menyatakan bahwa Protokol dan Dokumen yang Berhubungan Dengan Protokol berikut ini telah mendapatkan Persetujuan Etik :			
No Protokol	UH21030146		No Sponsor Protokol
Peneliti Utama	dr. Salmawati Maryati		Sponsor
Judul Peneliti	Studi Hubungan Parameter Status Gizi dan Status Inflamasi terhadap Luaran Klinis Pasien Kanker Kolorektal		
No Versi Protokol	1		Tanggal Versi 8 Maret 2021
No Versi PSP			Tanggal Versi
Tempat Penelitian	RS Dr. Wahidin Sudirohusodo Makassar		
Jenis Review	<input checked="" type="checkbox"/> Exempted <input type="checkbox"/> Expedited <input type="checkbox"/> Fullboard Tanggal	Masa Berlaku 26 Maret 2021 sampai 26 Maret 2022	Frekuensi review lanjutan
Ketua Komisi Etik Penelitian Kesehatan FKUH	Nama Prof.Dr.dr. Suryani As'ad, M.Sc.,Sp.GK (K)		Tanda tangan  
Sekretaris Komisi Etik Penelitian Kesehatan FKUH	Nama dr. Agussalim Bukhari, M.Med.,Ph.D.,Sp.GK (K)		Tanda tangan  
Kewajiban Peneliti Utama:			
<ul style="list-style-type: none">Menyerahkan Amandemen Protokol untuk persetujuan sebelum di implementasikanMenyerahkan Laporan SAE ke Komisi Etik dalam 24 Jam dan dilengkapi dalam 7 hari dan Lapor SUSAR dalam 72 Jam setelah Peneliti Utama menerima laporanMenyerahkan Laporan Kemajuan (progress report) setiap 6 bulan untuk penelitian resiko tinggi dan setiap setahun untuk penelitian resiko rendahMenyerahkan laporan akhir setelah Penelitian berakhirMelaporkan penyimpangan dari protokol yang disetujui (protocol deviation / violation)Mematuhi semua peraturan yang ditentukan			