DAFTAR PUSTAKA

Akram, Muhammad, Mehwish Iqbal, Muhammad Daniyal, and Asmat Ullah Khan. 2017. "Awareness and Current Knowledge of Breast Cancer." *Biological Research* 50(1):33.

Aranda-Gutierrez, Alejandro and Hector M. Diaz-Perez. 2019. *Histology, Mammary Glands*. StatPearls Publishing.

Alkabban, F. M., & Ferguson, T. (2020). Breast Cancer. *Cambridge Handbook of Psychology, Health and Medicine, Second Edition*, 577–580. https://www.ncbi.nlm.nih.gov/books/NBK482286/

Asano, Y., Kashiwagi, S., Onoda, N., Noda, S., Kawajiri, H., Takashima, T., Ohsawa, M., Kitagawa, S., & Hirakawa, K. (2016). Predictive Value of Neutrophil/Lymphocyte Ratio for Efficacy of Preoperative Chemotherapy in Triple-Negative Breast Cancer. *Annals of Surgical Oncology*, *23*(4), 1104. https://doi.org/10.1245/S10434-015-4934-0

Asri, R., Pontoh, V., & Merung, M. (2019). Neutrofil Darah Tepi pada Pasien Kanker Payudara Stadium Lanjut Sebelum dan Sesudah Dilakukan Tindakan. *Jurnal Biomedik (Jbm)*, *11*(1), 62. https://doi.org/10.35790/jbm.11.1.2019.23213

Bornstein, Marc H. 2018. "Tanner Stages." in *The SAGE Encyclopedia of Lifespan Human Development*. SAGE Publications, Inc.

Badr, N. M., Berditchevski, F., & Shaaban, A. M. (2020). The Immune Microenvironment in Breast Carcinoma: Predictive and Prognostic Role in the Neoadjuvant Setting. *Pathobiology*, *87*(2), 61–74. https://doi.org/10.1159/000504055

Chae, S., Kang, K. M., Kim, H. J., Kang, E., Park, S. Y., Kim, J. H., Kim, S. H., Kim, S. W., & Kim, E. K. (2018). Neutrophil–lymphocyte ratio predicts response to chemotherapy in triple-negative breast cancer. *Current Oncology*, *25*(2), e113. https://doi.org/10.3747/CO.25.3888

Cao, Su Sheng and Cun Tao Lu. 2016. "Recent Perspectives of Breast Cancer Prognosis and Predictive Factors (Review)." *Oncology Letters* 12(5):3674–78.

Chapman, Joseph and Yaoping Zhang. 2018. *Histology, Hematopoiesis*. StatPearls Publishing.

Corbeau, Iléana, William Jacot, and Séverine Guiu. 2020. "Neutrophil to Lymphocyte Ratio as Prognostic and Predictive Factor in Breast Cancer Patients: A Systematic Review." *Cancers* 12(4).

Edechi, Chidalu A., Nnamdi Ikeogu, Jude E. Uzonna, and Yvonne Myal. 2019b. "Regulation of Immunity in Breast Cancer." *Cancers* 11(8).

Edechi, C. A., Ikeogu, N., Uzonna, J. E., & Myal, Y. (2019). Regulation of immunity in breast cancer. In *Cancers* (Vol. 11, Issue 8). MDPI AG. https://doi.org/10.3390/cancers11081080

Ethier, Josee Lyne, Danielle Desautels, Arnoud Templeton, Prakesh S. Shah, and Eitan Amir. 2017. "Prognostic Role of Neutrophil-to-Lymphocyte Ratio in Breast Cancer: A Systematic Review and Meta-Analysis." *Breast Cancer Research*.

Fang, Q., Tong, Y.-W., Wang, G., Zhang, N., Chen, W.-G., Li, Y.-F., Shen, K.-W., Wu, B.-W., & Chen, X.-S. (2018). Neutrophil-to-lymphocyte ratio, obesity, and breast cancer risk in Chinese population. *Medicine*, *97*(30).

https://doi.org/10.1097/MD.0000000000011692

Fisusi, F. A., & Akala, E. O. (2019). Drug Combinations in Breast Cancer Therapy. *Pharmaceutical Nanotechnology*, *7*(3), 3. https://doi.org/10.2174/2211738507666190122111224

Giyartika, Farida and Soedjajadi Keman. 2020. "The Differences of Improving Leukosit in Radiographers at Islamic Hospital Jemursari Surabaya." *JURNAL KESEHATAN LINGKUNGAN*.

Gürağaç, Ali and Zafer Demirer. 2016. "The Neutrophil-to-Lymphocyte Ratio in Clinical Practice." *Journal of the Canadian Urological Association* 10(3- 4April):141.

Gago-Dominguez, M., Matabuena, M., Redondo, C. M., Patel, S. P., Carracedo, A., Ponte, S. M., Martínez, M. E., & Castelao, J. E. (2020). Neutrophil to lymphocyte ratio and breast cancer risk: analysis by subtype and potential interactions. *Scientific Reports 2020 10:1*, *10*(1), 1–11. https://doi.org/10.1038/s41598-020-70077-z

Hartono, B., Pontoh, V. S., & Merung, M. A. (2015). Penilaian Jumlah Neutrofil , Limfosit Dan Trombosit , Neutrofil Limfosit , Serta Rasio Trombosit Penderita Karsinoma Payudara. *Jurnal Biomedik*, *7*(3), 163–170.

Huszno, J., & Kolosza, Z. (2019). Prognostic value of the neutrophil-lymphocyte, platelet-lymphocyte and monocyte-lymphocyte ratio in breast cancer patients. *Oncology Letters*, *18*(6), 6275–6283. https://doi.org/10.3892/OL.2019.10966

Institute for Quality and Efficiency in Health Care (IQWiG). (2020). *The innate and adaptive immune systems*. https://www.ncbi.nlm.nih.gov/books/NBK279396/

Jesinger, Robert A. 2014. "Breast Anatomy for the Interventionalist." *Techniques in*

Vascular and Interventional Radiology 17(1):3–9.

Kementerian Kesehatan, Indonesia 2015. *KANKER PAYUDARA*

Kim, Hee Yeon, Tae Hyun Kim, Hye Kyoung Yoon, and Anbok Lee. 2019. "The Role of Neutrophil-Lymphocyte Ratio and Platelet-Lymphocyte Ratio in Predicting Neoadjuvant Chemotherapy Response in Breast Cancer." *Journal of Breast Cancer* 22(3):425–38.

Kamińska, M., Ciszewski, T., Łopacka-Szatan, K., Miotła, P., & Starosławska, E. (2015). Breast cancer risk factors. *Przegląd Menopauzalny = Menopause Review*, *14*(3), 196. https://doi.org/10.5114/PM.2015.54346

Kim, J. Y., Jung, E. J., Kim, J. M., Lee, H. S., Kwag, S. J., Park, J. H., Park, T., Jeong, S. H., Jeong, C. Y., & Ju, Y. T. (2020). Dynamic changes of neutrophil-to-lymphocyte ratio and platelet-to-lymphocyte ratio predicts breast cancer prognosis. *BMC Cancer*, *20*(1), 1–8. https://doi.org/10.1186/s12885-020-07700-9

Kim, T. G., Park, W., Choi, D. H., Park, H. C., Kim, S.-H., Cho, Y. B., Yun, S. H., Kim, H. C., Lee, W. Y., Lee, J., Park, J. O., & Park, Y. S. (2017). Effect of leukocyte alteration on treatment outcomes following preoperative chemoradiotherapy in patients with rectal cancer. *Radiation Oncology Journal*, *35*(3), 217. https://doi.org/10.3857/ROJ.2017.00269

Koh, C.-H., Bhoo-Pathy, N., Ng, K.-L., Jabir, R. S., Tan, G.-H., See, M.-H., Jamaris, S., & Taib, N. A. (2015). Utility of pre-treatment neutrophil–lymphocyte ratio and platelet–lymphocyte ratio as prognostic factors in breast cancer. *British Journal*

of Cancer, *113*(1), 150. https://doi.org/10.1038/BJC.2015.183

Lee, O. H., & Min, S.-Y. (2020a). Decrease of peripheral blood lymphocyte count predicts response to neoadjuvant chemotherapy in breast cancer patients. *Korean Journal of Clinical Oncology*, *16*(2), 79–88. https://doi.org/10.14216/KJCO.20013

Martins, Eduarda Cristina, Lilian Da Fe Silveira, Karin Viegas, Andrea Diez Beck, Geferson Fioravantti Júnior, Rafael Viegas Cremonese, and Priscila Schmidt Lora. 2019. "Neutrophil-Lymphocyte Ratio in the Early Diagnosis of Sepsis in an Intensive Care Unit: A Case-Control Study." *Revista Brasileira de Terapia Intensiva* 31(1):63–70.

Mayoclinic. (2019). *Lymphocytosis (high lymphocyte count) Causes - Mayo Clinic*. https://www.mayoclinic.org/symptoms/lymphocytosis/basics/causes/sym-20050660

Mayoclinic. (2020). *Neutropenia (low neutrophil count) Causes - Mayo Clinic*. https://www.mayoclinic.org/symptoms/neutropenia/basics/causes/sym-20050854

Makki, J. (2015). Diversity of Breast Carcinoma: Histological Subtypes and Clinical Relevance. *Clinical Medicine Insights. Pathology*, *8*(1), 23. https://doi.org/10.4137/CPATH.S31563

Mantas, D., Kostakis, I. D., Machairas, N., & Markopoulos, C. (2016). White blood cell and platelet indices as prognostic markers in patients with invasive ductal breast carcinoma. *Oncology Letters*, *12*(2), 1610. https://doi.org/10.3892/OL.2016.4760

Mimica, X., Acevedo, F., Oddo, D., Ibáñez, C., Medina, L., Kalergis, A., Camus, M., & Sánchez, C. (2016). Evaluación del valor pronóstico de la relación neutrófilos/linfocitos en cáncer de mama de subtipos agresivos. *Revista Medica de Chile*, *144*(6), 691–696. https://doi.org/10.4067/S0034-98872016000600001

Newburger, Peter E. and David C. Dale. 2013. "Evaluation and Management of Patients with Isolated Neutropenia." *Seminars in Hematology* 50(3):198–206.

Obaid, R. M., Yaseen, F. T., & Mukhlif, M. Y. (2020). Blood cells depletion after chemotherapy in Iraqi women with breast cancer. *Indian Journal of Forensic Medicine and Toxicology*, *14*(4), 3379–3382. https://doi.org/10.37506/ijfmt.v14i4.12146

Ocana, Alberto, Cristina Nieto-Jiménez, Atanasio Pandiella, and Arnoud J. Templeton. 2017. "Neutrophils in Cancer: Prognostic Role and Therapeutic Strategies." *Molecular Cancer* 16(1).

Ouyang, Zhengxiao, Dan Peng, and Dibya Purush Dhakal. 2013. "Risk Factors for Hematological Toxicity of Chemotherapy for Bone and Soft Tissue Sarcoma." *Oncology Letters* 5(5):1736–40.

Onyema, O. O., Decoster, L., Njemini, R., Forti, L. N., Bautmans, I., De Waele, M., & Mets, T. (2015). Chemotherapy-induced changes and immunosenescence of CD8+ T-cells in patients with breast cancer. *Anticancer Research*, *35*(3), 1481–1490.

Orditura, M., Galizia, G., Diana, A., Saccone, C., Cobellis, L., Ventriglia, J., Iovino, F., Romano, C., Morgillo, F., Mosca, L., Diadema, M. R., Lieto, E., Procaccini, E.,

De Vita, F., & Ciardiello, F. (2016). Neutrophil to lymphocyte ratio (NLR) for prediction of distant metastasis-free survival (DMFS) in early breast cancer: a propensity score-matched analysis. *ESMO Open*, *1*(2), e000038. https://doi.org/10.1136/ESMOOPEN-2016-000038

Pillay, Jaclyn and Tammy J. Davis. 2018. *Physiology, Lactation*. StatPearls Publishing.

Pusat Data dan Informasi, K. K. I. (2015). *InfoDATIN 4 Februari-Hari Kanker Sedunia*.

Rinaldi, Rachel M., Amit Sapra, and Lisa S. Bellin. 2020. *Breast Lymphatics*. StatPearls Publishing.

Rivard, Allyson B. and Steve S. Bhimji. 2018. *Anatomy, Thorax, Breast*. StatPearls Publishing.

Rosales, Carlos. 2018. "Neutrophil: A Cell with Many Roles in Inflammation or Several Cell Types?" *Frontiers in Physiology* 9(FEB):113.

Schiavoni, G., Galdiero, M. R., Masucci, M. T., Minopoli, M., & Carriero, M. V. (2019). Tumor Associated Neutrophils. Their Role in Tumorigenesis, Metastasis, Prognosis and Therapy. *Frontiers in Oncology | Www.Frontiersin.Org*, *9*, 1146. https://doi.org/10.3389/fonc.2019.01146

Selders, Gretchen S., Allison E. Fetz, Marko Z. Radic, and Gary L. Bowlin. 2017. "An Overview of the Role of Neutrophils in Innate Immunity, Inflammation and Host-Biomaterial Integration." *Regenerative Biomaterials* 4(1):55–68.

Setyowibowo, Hari, Fredrick Dermawan Purba, Joke A. M. Hunfeld, Aulia Iskandarsyah, Sawitri S. Sadarjoen, Jan Passchier, and Marit Sijbrandij. 2018. "Quality of Life and Health Status of Indonesian Women with Breast Cancer Symptoms before

the Definitive Diagnosis: A Comparison with Indonesian Women in General." *PLoS ONE* 13(7).

Sharma, Ganesh N., Rahul Dave, Jyotsana Sanadya, Piush Sharma, and K. K. Sharma. 2010. "Various Types and Management of Breast Cancer: An Overview." *Journal of Advanced Pharmaceutical Technology and Research* 1(2):109–26.

Shen, Meng, Jian Wang, and Xiubao Ren. 2018. "New Insights into Tumor- Infiltrating B Lymphocytes in Breast Cancer: Clinical Impacts and Regulatory Mechanisms." *Frontiers in Immunology* 9(MAR):470.

Simon, Alice and Kathryn Robb. 2014. "Cancer: Breast." Pp. 577–80 in *Cambridge Handbook of Psychology, Health and Medicine, Second Edition*. Cambridge University Press.

Sinn, Hans Peter and Hans Kreipe. 2013. "A Brief Overview of the WHO Classification of Breast Tumors, 4th Edition, Focusing on Issues and Updates from the 3rd Edition." *Breast Care* 8(2):149–54.

Solikhah, Solikhah, Supannee Promthet, Nitchamon Rakkapao, and Cameron P. Hurst. 2017. "Validation of an Indonesian Version of the Breast Cancer Awareness Scale (BCAS-I)." *Asian Pacific Journal of Cancer Prevention* 18(2):515–22.

Sun, Yi Sheng, Zhao Zhao, Zhang Nv Yang, Fang Xu, Hang Jing Lu, Zhi Yong Zhu, Wen Shi, Jianmin Jiang, Ping Ping Yao, and Han Ping Zhu. 2017. "Risk Factors and Preventions of Breast Cancer." *International Journal of Biological Sciences* 13(11):1387–97.

Song, M., Graubard, B. I., Rabkin, C. S., & Engels, E. A. (2021). Neutrophil-to-lymphocyte

ratio and mortality in the United States general population. *Scientific Reports 2021 11:1*, *11*(1), 1–9. https://doi.org/10.1038/s41598-020-79431-7

Tavares-Murta, B. M., & Candido Murta, E. F. (2008). Systemic Leukocyte Alterations in Cancer and their Relation to Prognosis. *The Open Cancer Journal*, *2*(1), 53–58. https://doi.org/10.2174/1874079000802010053

Tigner, Alyssa, Sherif A. Ibrahim, and Ian Murray. 2020. *Histology, White Blood Cell*. StatPearls Publishing.

Uribe-Querol, Eileen and Carlos Rosales. 2015. "Neutrophils in Cancer: Two Sides of the Same Coin." *Journal of Immunology Research* 2015.

Verma, R., Foster, R. E., Horgan, K., Mounsey, K., Nixon, H., Smalle, N., Hughes, T. A., & Carter, C. R. (2016). Lymphocyte depletion and repopulation after chemotherapy for primary breast cancer. *Breast Cancer Research : BCR*, *18*(1). https://doi.org/10.1186/S13058-015-0669-X

Wang, F., Liu, Z.-Y., Xia, Y.-Y., Zhou, C., Shen, X.-M., Li, X.-L., Han, S.-G., Zheng, Y., Mao, Z.-Q., Gong, F.-R., Tao, M., Lian, L., & Li, W. (2015). Changes in neutrophil/lymphocyte and platelet/lymphocyte ratios after chemotherapy correlate with chemotherapy response and prediction of prognosis in patients with unresectable gastric cancer. *Oncology Letters*, *10*(6), 3411–3418. https://doi.org/10.3892/OL.2015.3783

Wang, Lulu. 2017. "Early Diagnosis of Breast Cancer." *Sensors (Switzerland)* 17(7).

(IQWiG), I. for Q. and E. in H. C. (2020). *The innate and adaptive immune systems*. https://www.ncbi.nlm.nih.gov/books/NBK279396/

Wahyuni, F. A., Supadmi, W., & Yuniarti, E. (n.d.). Jurnal Sains dan Informatika. *Jurnal Sains Dan Informatika*, *4*(2), 310–316. https://doi.org/10.22216/jsi.v4

WHO. (2016). WHO | Breast cancer: prevention and control. *WHO*. http://www.who.int/cancer/detection/breastcancer/en/

Wu, L., Saxena, S., & Singh, R. K. (2020). Neutrophils in the Tumor Microenvironment. *Advances in Experimental Medicine and Biology*, *1224*, 1. https://doi.org/10.1007/978-3-030-35723-8_1

Wu, M., Ma, M., Tan, Z., Zheng, H., & Liu, X. (2020). Neutrophil: A New Player in Metastatic Cancers. *Frontiers in Immunology*, *11*, 565165. https://doi.org/10.3389/FIMMU.2020.565165

Xu, J., Ni, C., Ma, C., Zhang, L., Jing, X., Li, C., Liu, Y., & Qu, X. (2017). Association of neutrophil/lymphocyte ratio and platelet/lymphocyte ratio with ER and PR in breast cancer patients and their changes after neoadjuvant chemotherapy. *Clinical and Translational Oncology 2017 19:8*, *19*(8), 989–996. https://doi.org/10.1007/S12094-017-1630-5

Yamazaki, T., Hannani, D., Poirier-Colame, V., Ladoire, S., Locher, C., Sistigu, A., Prada, N., Adjemian, S., Catani, J. P., Freudenberg, M., Galanos, C., André, F., Kroemer, G., & Zitvogel, L. (2014). Defective immunogenic cell death of HMGB1-deficient tumors: compensatory therapy with TLR4 agonists. *Cell Death and Differentiation*, *21*(1), 69. https://doi.org/10.1038/CDD.2013.72

Yoon, C. I., Kim, D., Ahn, S. G., Bae, S. J., Cha, C., Park, S., Park, S., Kim, S. Il, Lee, H. S., Park, J. Y., & Jeong, J. (2020). Radiotherapy-Induced High Neutrophil-to-

Lymphocyte Ratio is a Negative Prognostic Factor in Patients with Breast Cancer. *Cancers*, *12*(7), 1–12. https://doi.org/10.3390/CANCERS12071896

Youlden, Danny R., Susanna M. Cramb, Cheng Har Yip, and Peter D. Baade. 2014. "Incidence and Mortality of Female Breast Cancer in the Asia-Pacific Region." *Cancer Biology and Medicine* 11(2):101–15. StatPearls Publishing.

Zhang, W., Shen, Y., Huang, H., Pan, S., Jiang, J., Chen, W., Zhang, T., Zhang, C., & Ni, C. (2020). A Rosetta Stone for Breast Cancer: Prognostic Value and Dynamic Regulation of Neutrophil in Tumor Microenvironment. *Frontiers in Immunology*, *0*, 1779. https://doi.org/10.3389/FIMMU.2020.01779

LAMPIRAN

Lampiran 1 : Biodata Diri Penulis

Nama Lengkap	: Clarisa Tungabdi
Stambuk	: C011181539
Tempat/tanggal lahir	: Makassar, 18 April 2000
Agama	: Katolik
Suku	: Makassar
Alamat	: Jln. KH Wahid Hasyim No.174, Gowa
Nama Ayah	: Drs. Rusman Thoeng, M.Com, (Hons) BAP, Ak
Nama Ibu	: Wong Christina Salim
Alamat Orang tua	: Jln. KH Wahid Hasyim No.174, Gowa
Pekerjaan Orang tua	: Ayah (Dosen), Ibu (IRT)
Anak ke	: 5 dari 5 bersaudara
No.telp	: 082191769674/089518109613
Email	: clarisatungabdi@gmail.com

Riwayat Pendidikan Formal

Tahun	Institusi Pendidikan	Keterangan
2006-2012	SD Menara St. Martinus	
2012-2015	SMP Katolik Rajawali	
2015-2018	SMA Katolik Rajawali	IPA
2018-sekarang	Universitas Hasanuddin	Fakultas Kedokteran, Program Studi Sarjana Pendidikan Dokter

Riwayat Organisasi

Nama Organisasi	Jabatan	Tahun
Roentgen Photography Universitas Hasanuddin	Anggota	2018-sekarang
KKMK Unhas	Divisi Humas Wakil Ketua	2018-2019 2019-2020
Asian Medical Student's Association Universitas Hasanuddin (AMSA-Unhas)	*Executive Board of External Relation*	2019-2020
Asian Medical Student's Association Universitas Hasanuddin (AMSA-Unhas)	*General Secretary*	2020-2021
Departemen Anatomi Fakultas Kedokteran Universitas Hasanuddin	Asisten Dosen	2020-2021

Lampiran 2 : Tabel Data Penelitian

No	No. RM	Usia	ICD	Tgl Kemo	Tgl Lab 1	WBC1 (10^3/µL)	NEUT1	ANC1 (10^3/µL)	LYMPH1	ALC1 (10^3/µL)	RNL1	Tgl Lab2	WBC2 (10^3/µL)	NEUT2	ANC2 (10^3/µL)	LYMPH2	ALC2 (10^3/µL)	RNL2	Stadium	Histopatologi	Regimen Kemoterapi
1	865200	40	C50.8	8/1/2019	2/1/2019	19,6	78,3	15,35	10,7	2,10	7,32	15/01/2019	8,3	65,3	5,42	23,5	1,95	2,78	II A	invasif ductal carcinoma	kombinasi
2	877991	43	C50.8	23/4/2019	16/4/2019	7,3	58,7	4,29	27,4	2,00	2,14	29/4/2019	6	61,6	3,70	32,9	1,97	1,87	III B	adenocarcinoma musinosum moderate grade malignancy	Kombinasi
3	860401	53	C50.8	23/5/2019	17/5/2019	8,9	74,3	6,61	18,1	1,61	4,10	28/5/2019	6,5	89,6	5,82	8,2	0,53	10,93	III	invasive ductal carcinoma mamma, moderate differentiated	Kombinasi
4	879066	55	C50.8	11/4/2019	9/4/2019	12,6	59,6	7,51	19,5	2,46	3,06	15/04/2019	6,7	87,4	5,86	6,6	0,44	13,24	III B	invasif ductal carcinoma no other special type, grade 3	Kombinasi
5	880156	57	C50.8	2/7/2019	1/7/2019	10,5	51,3	5,39	35,6	3,74	1,44	9/7/2019	5,8	57,3	3,32	36,9	2,14	1,55	III B	invasif carcinoma mammae, no special type, moderate grade malignancy	Kombinasi
6	887322	64	C50.8	19/7/2019	18/07/2019	10,9	71,8	7,83	17,3	1,89	4,15	26/7/2019	4,8	77,4	3,72	18,9	0,91	4,10	III B	invasive ca mammae of no special type, moderate grade malignancy	Kombinasi
7	890792	42	C50.8	4/9/2019	30/8/2019	5,9	42,1	2,48	47	2,77	0,90	11/9/2019	1,5	9,1	0,14	83,6	1,25	0,11	III C	invasive carcinoma mammae	Kombinasi
8	881162	47	C50.8	27/5/2019	21/5/2019	12,8	61,4	7,86	24,6	3,15	2,50	1/6/2019	6,9	63,8	4,40	28,7	1,98	2,22	III B	invasif carcinoma mammae	Kombinasi
9	98443	61	C50.8	9/4/2019	2/4/2019	9,8	54,1	5,30	35,4	3,47	1,53	14/4/2019	6,1	60,8	3,71	34,6	2,11	1,76	III B	invasif carcinoma mammae no other special type, moderate grade malignancy	Kombinasi
10	891503	32	C50.8	20/9/2019	17/9/2019	7,4	58,6	4,34	33,1	2,45	1,77	26/9/2019	5	64,4	3,22	32,4	1,62	1,99	II	invasif carcinoma mammae, no other special type, high grade malignancy	Kombinasi
11	872944	65	C50.8	14/3/2019	8/3/2019	9,5	63,1	5,99	23	2,19	2,74	20/3/2019	1,6	25,1	0,40	68,3	1,09	0,37	IV	invasif ductal carcinoma mammae moderate differentiated	Kombinasi
12	467693	52	C50.8	14/1/2019	11/1/2019	5,2	52,9	2,75	33	1,72	1,60	21/1/2019	4,9	47,3	2,32	42,3	2,07	1,12	IV	fibrosis adenosa mammae	Tunggal
13	842557	52	C50.8	17/7/2019	10/7/2019	6,1	50,1	3,06	36,5	2,23	1,37	24/7/2019	8,5	52,3	4,45	33,7	2,86	1,55	III	invasif carcinoma mammae, no special type, high grade malignancy	Tunggal
14	893077	55	C50.8	19/9/2019	13/9/2019	8,8	53,6	4,72	31,7	2,79	1,69	20/9/2019	6,1	57	3,48	26,2	1,60	2,18	III	invasif carcinoma mammae no of special type,	Kombinasi

																				high grde malignancy	
15	884897	53	C50.8	7/10/2019	30/9/2019	7,4	68,7	5,08	25,3	1,87	2,72	14/10/2019	4,2	62	2,60	33,3	1,40	1,86	II	invasif carcinoma mammacof no special type moderately differentiated	Kombinasi
16	881288	48	C50.8	10/6/2019	7/6/2019	84,8	90,6	76,83	3,5	2,97	25,89	11/6/2019	58,9	91,1	53,66	4,4	2,59	20,70	III B	invasif carcinoma mammae high grade	Kombinasi
17	885868	58	C50.8	28/6/2019	27/6/2019	12,9	86,2	11,12	9,2	1,19	9,37	30/6/2019	10,6	87,4	9,26	9,8	1,04	8,92	IV	invasif carcinoma mammae no psecial type, high grade malignancy	Kombinasi
18	864739	47	C50.8	12/3/2019	6/3/2019	7,5	51,6	3,87	34	2,55	1,52	18/3/2019	4,4	62,6	2,75	30,2	1,33	2,07	III B	invasif carcinoma mammae of no other special type, moderate grade malignancy	kombinasi
19	867949	41	C50.8	4/2/2019	30/1/2019	8,5	63,2	5,37	23,3	1,98	2,71	11/2/2019	1,4	37,1	0,52	51	0,71	0,73	III B	invasif carcinoma mammae of no otherspecial type, moderate grade malignancy	Kombinasi
20	870120	65	C50.9	1/3/2019	28/2/2019	15,8	82,2	12,99	11,8	1,86	6,97	5/3/2019	6,4	84,8	5,43	10,1	0,65	8,40	III C	invasif carcinoma mammae of no other special type , high grade malignancy	kombinasi
21	840800	46	C50.9	9/8/2019	7/8/2019	6,9	85	5,87	9,2	0,63	9,24	15/8/2019	7,5	78,1	5,86	12	0,90	6,51	III C	invasif carcinoma mammae no special type moderate grade malignancy	tunggal
22	869001	56	C50.9	30/1/2019	24/1/2019	9,3	58	5,39	31,5	2,93	1,84	6/2/2019	3,9	50,7	1,98	37,4	1,46	1,36	IV	invasif carcinoma mammae no special type high grade malignancy	Kombinasi
23	867601	61	C50.9	11/2/2019	7/2/2019	9,2	49,7	4,57	37,5	3,45	1,33	18/2/2019	5	58,6	2,93	34,6	1,73	1,69	III B	invasif carcinoma mammae no special type high grade malignancy	Kombinasi
24	866191	57	C50.9	7/5/2019	30/4/2019	7,7	56,9	4,38	34,5	2,66	1,65	14/5/2019	1,4	19,6	0,27	77	1,08	0,25	IV	invasif ductal carcinoma mammae, no special type	Kombinasi
25	883812	67	C50.9	14/8/2019	8/8/2019	10,4	42,2	4,39	39,9	4,15	1,06	20/8/5019	4,5	24,9	1,12	65,4	2,94	0,38	III	invasif carcinoma mammae no	kombinasi

																					special type moderate grade malignancy	
26	878252	60	C50.9	10/4/2019	3/4/2019	12,1	74	8,95	15,5	1,88	4,77	15/4/2019	9	77,4	6,97	17,1	1,54	4,53	III C	malignant tumor mammae	Kombinasi
27	879672	60	C50.9	7/10/2019	2/10/2019	13,8	69,6	9,60	21,3	2,94	3,27	11/10/2019	7,9	85,9	6,79	12,5	0,99	6,87	III B	malignant phylloides tumor mammae	Kombinasi
28	882543	36	C50.9	13/5/2019	11/5/2019	14	81,7	11,44	11,4	1,60	7,17	20/5/2019	2,5	16,9	0,42	49,4	1,24	0,34	III B	invasif carcinoma mammae	Kombinasi
29	887454	53	C50.9	2/9/2019	27/8/2019	8,2	65,5	5,37	22,4	1,84	2,92	9/9/2019	3	59,6	1,79	26,1	0,78	2,28	III B	mucinous carcinoma mammae hipercellular variant low grade malignancy	Kombinasi
30	873405	39	C50.9	14/3/2019	11/3/2019	7,1	55,5	3,94	32,7	2,32	1,70	19/3/2019	5,2	62,1	3,23	33,8	1,76	1,84	III A	invasif carcinoma mammae no special type moderate grade malignancy	Kombinasi
31	859075	39	C50.9	13/6/2019	11/6/2019	6,4	72,2	4,62	16,5	1,06	4,38	18/6/2019	3,4	78	2,65	18	0,61	4,33	III	malignant phylloides tumor dan fibroadmoma mammae	Kombinasi
32	896875	43	C50.9	19/11/2019	19/11/2019	5,4	38,1	2,06	44,8	2,42	0,85	25/11/2019	4,7	52,1	2,45	41,7	1,96	1,25	II	ductal carcinoma in situ intermediate nuclear	Kombinasi
33	837966	52	C50.9	22/1/2019	16/1/2019	8,4	71,4	6,00	15,9	1,34	4,49	29/1/2019	1,4	32,1	0,45	47,9	0,67	0,67	IV	adnocarcinoma mammae	Kombinasi
34	883556	48	C50.9	12/7/2019	9/7/2019	9,7	88,6	8,59	7,2	0,70	12,31	17/7/2019	2,5	55,5	1,39	38,4	0,96	1,45	IV	invasif carcinoma mammae no special type moderate grade malignancy	Tunggal
35	767517	50	C50.9	4/12/2019	28/11/2019	9,4	62,2	5,85	29,7	2,79	2,09	9/12/2019	2,5	48,5	1,21	45,7	1,14	1,06	IV	invasif carcinoma mammae no special type moderate grade malignancy	tunggal
36	897678	62	C50.9	15/10/2019	9/10/2019	8,3	60,5	5,02	29,1	2,42	2,08	21/10/2019	5,3	52,8	2,80	43,9	2,33	1,20	IV	lesi atipikal duktuli invasif	Kombinasi
37	875019	52	C50.9	1/4/2019	28/3/2019	7,2	66,3	4,77	18,9	1,36	3,51	8/4/2019	3,3	51,7	1,71	40	1,32	1,29	III C	invasif carcinoma mammae no special type, moderate differentiated	Kombinasi
38	879649	68	C50.9	25/5/2019	21/5/2019	9	64,2	5,78	24,2	2,18	2,65	29/5/2019	4,6	71,2	3,28	26,2	1,21	2,72	IV	invasif ductal carcinoma mammae , poorly differentiated	Kombinasi
39	902210	49	C50.9	4/12/2019	30/11/2019	6,8	68,7	4,67	23,7	1,61	2,90	10/12/2019	1,3	12,5	0,16	81,7	1,06	0,15	IV	invasif carcinoma mammae no	kombinasi

																				special type moderate grade malignancy	
40	205581	70	C50.8	12/11/2019	11/11/2019	10,2	65,5	6,68	21,4	2,18	3,06	19/11/2019	1,2	11	0,13	72,4	0,87	0,15	IV	invasif ductal carcinoma mammae, high grade malignancy	tunggal
41	894415	45	C50.8	25/10/2019	23/10/2019	6,4	56,6	3,62	29,3	1,88	1,93	30/10/2019	3,1	58,7	1,82	34,9	1,08	1,68	IV	invasif carcinoma mammae no special type , high grade malignancy	Kombinasi
42	883472	32	C50.9	29/5/2019	28/5/2019	16,4	72,7	11,92	19,1	3,13	3,81	3/6/2019	1	8,7	0,09	70,1	0,70	0,12	IV	invasif carcinoma mammae, moderate grade malignancy	kombinasi

Lampiran 3 : Surat Permohonan Izin Penelitian

KEMENTERIAN RISET, TEKNOLOGI DAN PENDIDIKAN TINGGI
UNIVERSITAS HASANUDDIN
FAKULTAS KEDOKTERAN
PROGRAM STUDI SARJANA KEDOKTERAN
Jl. Perintis Kemerdekaan Km. 10 Tamalanrea, Makassar 90245, Telp. (0411) 587436, Fax. (0411) 586297

Nomor : 4438/UN4.6.8/PT.01.04/2021 — 2 Maret 2021
Lamp : ---
Hal : Permohonan Izin Penelitian

Kepada Yth. :
Direktur RSUP Dr. Wahidin Sudirohusodo
Di-
Makassar

Dengan hormat, disampaikan bahwa mahasiswa Program Studi Pendidikan Dokter Fakultas Kedokteran Universitas Hasanuddin di bawah ini :

N a m a : Clarisa Tungabdi
N i m : C011181539

bermaksud melakukan penelitian di RSUP Dr. Wahidin Sudirohusodo dengan judul penelitian **"Kadar Leukosit Dan Rasio Neutrofil Limfosit Pada Pasien Kanker Payudara Sebelum Dan Sesudah Kemoterapi Di RSUP Dr. Wahidin Sudirohusodo Makassar"**

Sehubungan hal tersebut kiranya yang bersangkutan dapat diberi izin untuk melakukan Penelitian dalam rangka penyelesaian studinya.

Demikian permohonan kami, atas bantuan dan kerjasamanya disampaikan terima kasih.

Ketua,
Program Studi Sarjana Kedokteran
Fakultas Kedokteran Unhas

Dr. dr. Siti Rafiah,MSi
NIP. 196809301997032001

Tembusan Yth :
1. Arsip

Lampiran 4 : Surat Rekomendasi Persetujuan Etik Penelitian

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.,MMed.PhD, SpGK TELP. 081241850858, 0411 5780103, Fax : 0411-581431

REKOMENDASI PERSETUJUAN ETIK
Nomor : 359/UN4.6.4.5.31/ PP36/ 2021

Tanggal: 31 Mei 2021

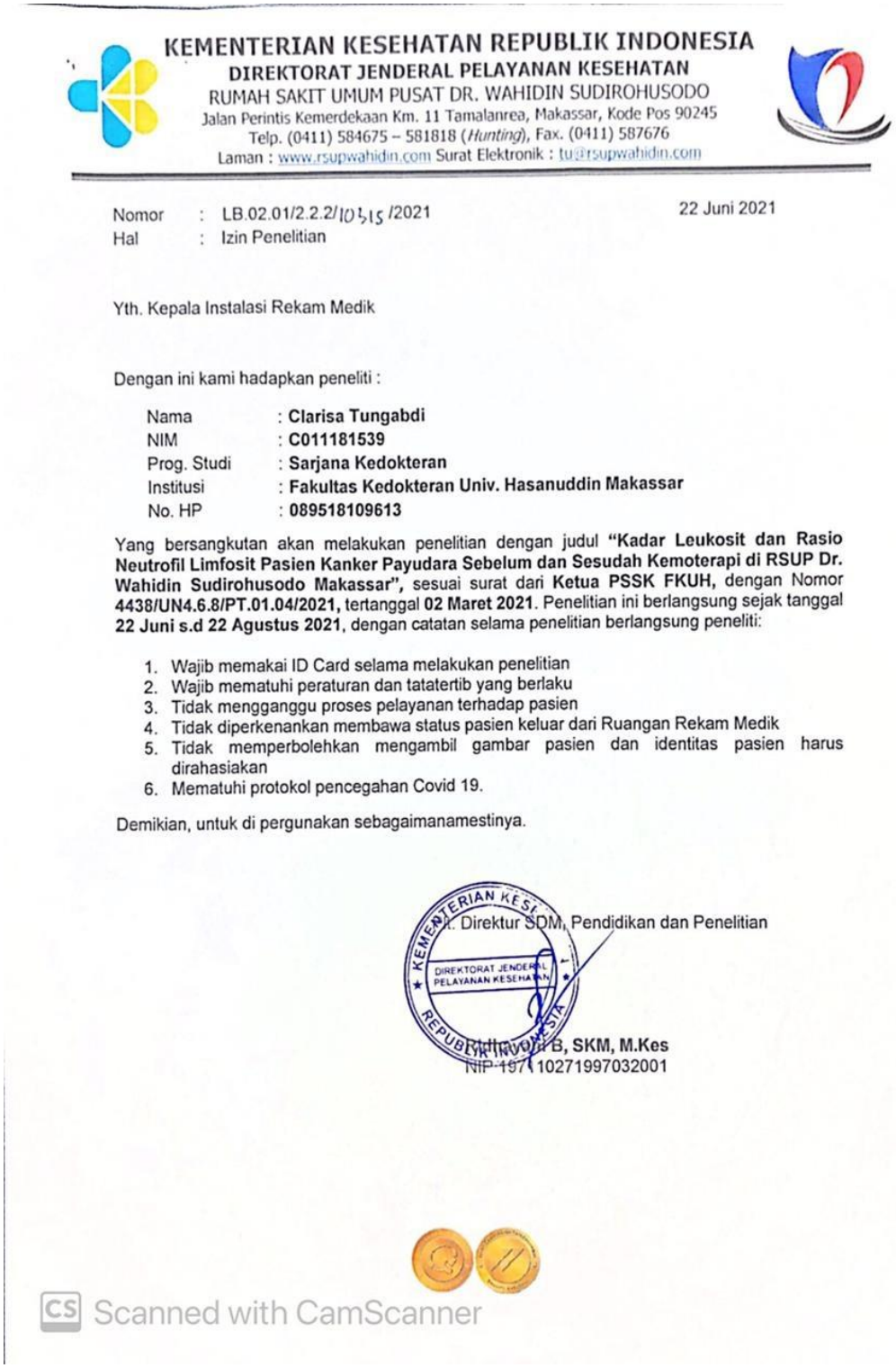
Dengan ini Menyatakan bahwa Protokol dan Dokumen yang Berhubungan Dengan Protokol berikut ini telah mendapatkan Persetujuan Etik :

No Protokol	UH21050311	No Sponsor Protokol	
Peneliti Utama	**Clarisa Tungabdi**	Sponsor	
Judul Peneliti	Kadar Leukosit dan Rasio Neutrofil Limfosit pada Pasien Kanker Payudara Sebelum dan Sesudah Kemoterapi di RSUP Dr. Wahidin Sudirohusodo Makassar		
No Versi Protokol	**1**	Tanggal Versi	**17 Mei 2021**
No Versi PSP		Tanggal Versi	
Tempat Penelitian	**RS Dr. Wahidin Sudirohusodo Makassar**		
Jenis Review	[x] Exempted [ ] Expedited [ ] Fullboard Tanggal	Masa Berlaku **31 Mei 2021** sampai **31 Mei 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:

- Menyerahkan Amandemen Protokol untuk persetujuan sebelum di implementasikan
- Menyerahkan Laporan SAE ke Komisi Etik dalam 24 Jam dan dilengkapi dalam 7 hari dan Lapor SUSAR dalam 72 Jam setelah Peneliti Utama menerima laporan
- Menyerahkan Laporan Kemajuan (progress report) setiap 6 bulan untuk penelitian resiko tinggi dan setiap setahun untuk penelitian resiko rendah
- Menyerahkan laporan akhir setelah Penelitian berakhir
- Melaporkan penyimpangan dari prokol yang disetujui (protocol deviation / violation)
- Mematuhi semua peraturan yang ditentukan

Lampiran 5 : Surat Izin Penelitian



KEMENTERIAN KESEHATAN REPUBLIK INDONESIA
DIREKTORAT JENDERAL PELAYANAN KESEHATAN
RUMAH SAKIT UMUM PUSAT DR. WAHIDIN SUDIROHUSODO
Jalan Perintis Kemerdekaan Km. 11 Tamalanrea, Makassar, Kode Pos 90245
Telp. (0411) 584675 – 581818 (*Hunting*), Fax. (0411) 587676
Laman : www.rsupwahidin.com Surat Elektronik : tu@rsupwahidin.com

Nomor : LB.02.01/2.2.2/1015 /2021 — 22 Juni 2021
Hal : Izin Penelitian

Yth. Kepala Instalasi Rekam Medik

Dengan ini kami hadapkan peneliti :

Nama	: **Clarisa Tungabdi**
NIM	: **C011181539**
Prog. Studi	: **Sarjana Kedokteran**
Institusi	: **Fakultas Kedokteran Univ. Hasanuddin Makassar**
No. HP	: **089518109613**

Yang bersangkutan akan melakukan penelitian dengan judul **"Kadar Leukosit dan Rasio Neutrofil Limfosit Pasien Kanker Payudara Sebelum dan Sesudah Kemoterapi di RSUP Dr. Wahidin Sudirohusodo Makassar",** sesuai surat dari **Ketua PSSK FKUH,** dengan Nomor **4438/UN4.6.8/PT.01.04/2021,** tertanggal **02 Maret 2021**. Penelitian ini berlangsung sejak tanggal **22 Juni s.d 22 Agustus 2021**, dengan catatan selama penelitian berlangsung peneliti:

1. Wajib memakai ID Card selama melakukan penelitian
2. Wajib mematuhi peraturan dan tatatertib yang berlaku
3. Tidak mengganggu proses pelayanan terhadap pasien
4. Tidak diperkenankan membawa status pasien keluar dari Ruangan Rekam Medik
5. Tidak memperbolehkan mengambil gambar pasien dan identitas pasien harus dirahasiakan
6. Mematuhi protokol pencegahan Covid 19.

Demikian, untuk di pergunakan sebagaimanamestinya.

a.n. Direktur SDM, Pendidikan dan Penelitian

Dr. Irvono B, SKM, M.Kes
NIP 197110271997032001

Scanned with CamScanner