

BAB VIII KESIMPULAN DAN SARAN

8.1 Kesimpulan

Dari penelitian ini dapat disimpulkan bahwa:

1. GETA yang dikombinasikan dengan ESPB pada pasien Carcinoma mammae yang menjalani operasi unilateral MRM menurunkan NRS dibandingkan dengan GETA saja.
2. ESPB dapat menurunkan penggunaan opioid selama periode sesudah operasi.
3. ESPB menurunkan NLR yang menandakan suatu proses kekebalan tubuh.
4. ESPB dalam penelitian ini memperlihatkan lama rawat pasien yang lebih singkat.

8.2 Saran

Adapun saran yang bisa kami berikan adalah:

1. GETA dengan ESPB sebagai salah satu komponen multi modal analgesia pada operasi MRM.
2. ESPB dapat diterapkan pada operasi di daerah dada selain MRM, seperti thorakotomi dengan memberikan hasil yang tidak jauh berbeda.
3. Untuk operasi daerah abdomen dan sekitarnya, bahkan partus normal, dimungkinkan ESPB akan memiliki efek yang sama dalam menurunkan NRS.
4. Dengan mempersingkat waktu rawat inap pasien, akan memberikan keuntungan biaya bagi rumah sakit, terutama pasien asuransi.

DAFTAR PUSTAKA

1. World Health Organization. Breast cancer. 2021.
2. Leong RW, Tan ESJ, Wong SN, Tan KH, Liu CW. Efficacy of erector spinae plane block for analgesia in breast surgery: a systematic review and meta-analysis. Vol. 76, *Anaesthesia*. Blackwell Publishing Ltd; 2021. hlm. 404–13.
3. Canikli Adigüzel Ş, Akyurt D, Bahadır Altun H, Tulgar S, Ültan Özgen G. Can Neutrophil-Lymphocyte Ratio, Platelet-Lymphocyte Ratio, or Systemic Immune Inflammation Index Be an Indicator of Postoperative Pain in Patients Undergoing Laparoscopic Cholecystectomy? *Cureus*. 19 Januari 2023;
4. Buonacera A, Stancanelli B, Colaci M, Malatino L. Neutrophil to Lymphocyte Ratio: An Emerging Marker of the Relationships between the Immune System and Diseases. Vol. 23, *International Journal of Molecular Sciences*. MDPI; 2022.
5. Chin KJ, El-Boghdadly K. Mechanisms of action of the erector spinae plane (ESP) block: a narrative review. Vol. 68, *Canadian Journal of Anesthesia*. 2021.
6. Kot P, Rodriguez P, Granell M, Cano B, Rovira L, Morales J, dkk. The erector spinae plane block: A narrative review. Vol. 72, *Korean Journal of Anesthesiology*. Korean Society of Anesthesiologists; 2019. hlm. 209–20.
7. Pawa A, King C, Thang C, White L. Erector spinae plane block: the ultimate 'plan A' block? Vol. 130, *British Journal of Anaesthesia*. Elsevier Ltd; 2023. hlm. 497–502.
8. Debbag S, Sarıcaoğlu F. Pectoral nerve block as the sole anesthetic technique for a modified radical mastectomy in a comorbid patient. *Saudi Med J*. 2019;40(12):1285–9.
9. Selvi O, Tulgar S. Use of the ultrasound-guided erector spinae plane block in segmental mastectomy. *Turk J Anaesthesiol Reanim*. 1 April 2019;47(2):158–60.
10. Forero M, Adhikary SD, Lopez H, Tsui C, Chin KJ. The erector spinae plane block a novel analgesic technique in thoracic neuropathic pain. *Reg Anesth Pain Med*. 23 Agustus 2016;41(5):621–7.
11. Tait RC, Zoberi K, Ferguson M, Levenhagen K, Luebbert RA, Rowland K, dkk. Persistent Post-Mastectomy Pain: Risk Factors and Current Approaches to Treatment. Vol. 19, *Journal of Pain*. Churchill Livingstone Inc.; 2018. hlm. 1367–83.
12. Yuksel SS, Chappell AG, Jackson BT, Wescott AB, Ellis MF. "Post Mastectomy Pain Syndrome: A Systematic Review of Prevention Modalities." *JPRAS Open*. 1 Maret 2022;31:32–49.
13. Wang L, Guyatt GH, Kennedy SA, Romerosa B, Kwon HY, Kaushal A, dkk. Predictors of persistent pain after breast cancer surgery: A systematic review and meta-analysis of observational studies. *CMAJ*. 4 Oktober 2016;188(14):E352–61.

14. Belfer I, Schreiber KL, Shaffer JR, Shnol H, Blaney K, Morando A, dkk. Persistent postmastectomy pain in breast cancer survivors: Analysis of clinical, demographic, and psychosocial factors. *Journal of Pain*. Oktober 2013;14(10):1185–95.
15. Andersen KG, Duriaud HM, Jensen HE, Kroman N, Kehlet H. Predictive factors for the development of persistent pain after breast cancer surgery. *Pain* [Internet]. 2015;156(12). Tersedia pada: https://journals.lww.com/pain/fulltext/2015/12000/predictive_factors_for_the_development_of.6.aspx
16. Attal N, Lanteri-Minet M, Laurent B, Fermanian J, Bouhassira D. The specific disease burden of neuropathic pain: Results of a French nationwide survey. *Pain*. Desember 2011;152(12):2836–43.
17. Bruce J, Thornton AJ, Powell R, Johnston M, Wells M, Heys SD, dkk. Psychological, surgical, and sociodemographic predictors of pain outcomes after breast cancer surgery: A population-based cohort study. *Pain* [Internet]. 2014;155(2):232–43. Tersedia pada: <https://www.sciencedirect.com/science/article/pii/S0304395913005381>
18. Schug SA, Palmer GM, Scott DA, Alcock M, Halliwell R, Mott JF. *Acute Pain Management: Scientific Evidence*.
19. Naszai M, Kurjan A, Maughan TS. The prognostic utility of pre-treatment neutrophil-to-lymphocyte-ratio (NLR) in colorectal cancer: A systematic review and meta-analysis. *Cancer Med*. 1 September 2021;10(17):5983–97.
20. Alfhili MA, Alsughayyir J, Basudan A, Ghneim HK, Aboul-Soud MAM, Marie M, dkk. Isolated and Combined Effect of Age and Gender on Neutrophil–Lymphocyte Ratio in the Hyperglycemic Saudi Population. *Medicina (Lithuania)*. 1 Agustus 2022;58(8).
21. Zahorec R. Neutrophil-to-lymphocyte ratio, past, present and future perspectives. *Bratislava Medical Journal*. 2021;122(7):474–88.
22. Song M, Graubard BI, Rabkin CS, Engels EA. Neutrophil-to-lymphocyte ratio and mortality in the United States general population. *Sci Rep*. 1 Desember 2021;11(1).
23. Howard R, Kanetsky PA, Egan KM. Exploring the prognostic value of the neutrophil-to-lymphocyte ratio in cancer. *Sci Rep*. 1 Desember 2019;9(1).
24. Bowen RC, Ann N, Little B, Harmer JR, Ma J, Mirabelli LG, dkk. Neutrophil-to-lymphocyte ratio as prognostic indicator in gastrointestinal cancers: a systematic review and meta-analysis [Internet]. Vol. 8, *Oncotarget*. 2017. Tersedia pada: www.impactjournals.com/oncotarget/
25. Cupp MA, Cariolou M, Tzoulaki I, Evangelos E, Berlanga-Taylor AJ. Neutrophil counts and cancer prognosis: an umbrella review of systematic reviews and meta-analyses of observational studies. Tersedia pada: <https://doi.org/10.1101/330076>
26. Corbeau I, Jacot W, Guiu S. Neutrophil to lymphocyte ratio as prognostic and predictive factor in breast cancer patients: A systematic review. Vol. 12, *Cancers*. MDPI AG; 2020.

27. Merjavy P. Title: Erector Spinae Plane Block Guideline [Internet]. [dikutip 17 Maret 2024]. Tersedia pada: https://www.ra-uk.org/images/ERAS_Protocols/CG0603-ESP-Block-SHSCT-Guideline.pdf
28. Onishi E, Toda N, Kameyama Y, Yamauchi M, Ueshima H. Comparison of clinical efficacy and anatomical investigation between retrolaminar block and erector spinae plane block. Vol. 2019, BioMed Research International. Hindawi Limited; 2019.
29. Sharma S, Arora S, Jafra A, Singh G. Efficacy of erector spinae plane block for postoperative analgesia in total mastectomy and axillary clearance: A randomized controlled trial. *Saudi J Anaesth.* 1 April 2020;14(2):186–91.
30. Seelam S, Nair A, Christopher A, Upputuri O, Naik V, Rayani B. Efficacy of single-shot ultrasound-guided erector spinae plane block for postoperative analgesia after mastectomy: A randomized controlled study. *Saudi J Anaesth.* 1 Januari 2020;14(1):22–7.
31. Shyan Siow W, Guan Cheng Lim J, Lian Woon K. Erector Spinae Plane Block for Mastectomy and Breast Flap Reconstructive Surgery: A Three Case Series. *Open J Anesthesiol* [Internet]. 2020;10:30–7. Tersedia pada: <https://doi.org/10.4236/ojanes.2019.101003>
32. Singh S, Kumar G, Akhileshwar. Ultrasound-guided erector spinae plane block for postoperative analgesia in modified radical mastectomy: A randomised control study. *Indian J Anaesth.* 1 Maret 2019;63(3).
33. Macintyre PE, Schug SA. Using the VitalSource ® ebook [Internet]. Tersedia pada: <https://online.vitalsource.com/user/new>
34. Moorthy A, Ní Eochagáin A, Dempsey E, Wall V, Marsh H, Murphy T, dkk. Postoperative recovery with continuous erector spinae plane block or video-assisted paravertebral block after minimally invasive thoracic surgery: a prospective, randomised controlled trial. *Br J Anaesth.* 1 Januari 2023;130(1):e137–47.
35. Kang RA, Chin KJ, Kim GS, Gwak MS, Kim JM, Choi GS, dkk. Bilateral continuous erector spinae plane block using a programmed intermittent bolus regimen versus intrathecal morphine for postoperative analgesia in living donor laparoscopic hepatectomy: A randomized controlled trial. *J Clin Anesth.* 1 Desember 2021;75.
36. Macaire P, Ho N, Nguyen T, Nguyen B, Vu V, Quach C, dkk. Ultrasound-Guided Continuous Thoracic Erector Spinae Plane Block Within an Enhanced Recovery Program Is Associated with Decreased Opioid Consumption and Improved Patient Postoperative Rehabilitation After Open Cardiac Surgery—A Patient-Matched, Controlled Before-and-After Study. *J Cardiothorac Vasc Anesth.* 1 Juni 2019;33(6):1659–67.
37. Restrepo-Garces CE, Chin KJ, Suarez P, Diaz A. Bilateral Continuous Erector Spinae Plane Block Contributes to Effective Postoperative Analgesia After Major Open Abdominal Surgery. *AA Case Rep.* Desember 2017;9(11):319–21.
38. Nagaraja P, Ragavendran S, Singh N, Asai O, Bhavya G, Manjunath N, dkk. Comparison of continuous thoracic epidural analgesia with bilateral erector spinae

- plane block for perioperative pain management in cardiac surgery. *Ann Card Anaesth.* 2018;21(3):323.
39. Domagalska M, Ciftsi B, Janusz P, Reysner T, Kolasinski J, Wieczorowska - Tobis K, dkk. The neutrophil-to-lymphocyte ratio (NLR) and platelet-to-lymphocyte ratio (PLR) levels following erector spinae plane block (ESPB) in posterior lumbar decompression: a randomized, controlled trial. *European Spine Journal.* 1 Desember 2023;
 40. Tantri AR, Rahmi R, Marsaban AHM, Satoto D, Rahyussalim AJ, Sukmono RB. Comparison of postoperative IL-6 and IL-10 levels following Erector Spinae Plane Block (ESPB) and classical Thoracolumbar Interfascial Plane (TLIP) block in a posterior lumbar decompression and stabilization procedure: a randomized controlled trial. *BMC Anesthesiol.* 1 Desember 2023;23(1).
 41. Kemenkes RI. IDN_B11_Buku Obesitas-1. 2015 [dikutip 28 Maret 2024];8–9. Tersedia pada: <https://p2ptm.kemkes.go.id/infographic-p2ptm/obesitas/klasifikasi-obesitas-setelah-pengukuran-imt>
 42. Ahuja D, Kumar V, Gupta N, Bharati SJ, Garg R, Mishra S, dkk. Comparison of the Efficacy of Ultrasound-Guided Serratus Anterior Plane Block Versus Erector Spinae Plane Block for Postoperative Analgesia After Modified Radical Mastectomy: A Randomised Controlled Trial. *Turk J Anaesthesiol Reanim.* 1 Desember 2022;50(6):435–42.
 43. Jacobs A, Lemoine A, Joshi GP, Van de Velde M, Bonnet F, Pogatzki-Zahn E, dkk. PROSPECT guideline for oncological breast surgery: a systematic review and procedure-specific postoperative pain management recommendations. *Anaesthesia.* 1 Mei 2020;75(5):664–73.
 44. <https://www.cdc.gov/healthyweight/assessing/bmi/index.html> [Internet]. 2022. Division of Nutrition, Physical Activity, and Obesity, National Center for Chronic Disease Prevention and Health Promotion.
 45. Forero M, Adhikary SD, Lopez H, Tsui C, Chin KJ. The erector spinae plane block a novel analgesic technique in thoracic neuropathic pain. *Reg Anesth Pain Med.* 23 Agustus 2016;41(5):621–7.
 46. Nair AS, Seelam S, Naik V, Rayani BK. Opioid-free mastectomy in combination with ultrasound-guided erector spinae block: A series of five cases. *Indian J Anaesth.* 1 Agustus 2018;62(8):632–4.
 47. Bonvicini D, Tagliapietra L, Giacomazzi A, Pizzirani E. Bilateral ultrasound-guided erector spinae plane blocks in breast cancer and reconstruction surgery. *J Clin Anesth* [Internet]. 2018;44:3–4. Tersedia pada: <https://www.sciencedirect.com/science/article/pii/S0952818017308450>
 48. Leong RW, Tan ESJ, Wong SN, Tan KH, Liu CW. Efficacy of erector spinae plane block for analgesia in breast surgery: a systematic review and meta-analysis. Vol. 76, *Anaesthesia.* Blackwell Publishing Ltd; 2021. hlm. 404–13.

49. Xin L, Hou N, Zhang Z, Feng Y. The Effect of Preoperative Ultrasound-Guided Erector Spinae Plane Block on Chronic Postsurgical Pain After Breast Cancer Surgery: A Propensity Score-Matched Cohort Study. *Pain Ther* [Internet]. 2022;11(1):93–106. Tersedia pada: <https://doi.org/10.1007/s40122-021-00339-9>
50. Zhang Y, Liu T, Zhou Y, Yu Y, Chen G. Analgesic efficacy and safety of erector spinae plane block in breast cancer surgery: a systematic review and meta-analysis. *BMC Anesthesiol*. 1 Desember 2021;21(1).
51. Gürkan Y, Aksu C, Kuş A, Yörükoğlu UH, Kılıç CT. Ultrasound guided erector spinae plane block reduces postoperative opioid consumption following breast surgery: A randomized controlled study. *J Clin Anesth* [Internet]. 2018;50:65–8. Tersedia pada: <https://www.sciencedirect.com/science/article/pii/S095281801830480X>
52. Gürkan Y, Aksu C, Kuş A, Yörükoğlu UH. Erector spinae plane block and thoracic paravertebral block for breast surgery compared to IV-morphine: A randomized controlled trial. *J Clin Anesth* [Internet]. 2020;59:84–8. Tersedia pada: <https://www.sciencedirect.com/science/article/pii/S0952818019304052>
53. Weng WT, Wang CJ, Li CY, Wen HW, Liu YC. Erector spinae plane block similar to paravertebral block for perioperative pain control in breast surgery: A meta-analysis study. *Pain Physician*. 2021;24(3):203–13.
54. He W, Wu Z, Zu L, Sun H, Yang X. Application of erector spinae plane block guided by ultrasound for postoperative analgesia in breast cancer surgery: A randomized controlled trial. Vol. 40, *Cancer Communications*. John Wiley and Sons Inc.; 2020. hlm. 122–5.
55. Aoyama Y, Sakura S, Tsuchiya R, Wittayapairoj A, Saito Y. Erector spinae plane block and paravertebral block for breast surgery: A retrospective propensity-matched noninferiority trial. *J Pain Res*. 2020;13:2367–76.
56. Aksu C, Kuş A, Yörükoğlu HU, Tor Kılıç C, Gürkan Y. Analgesic effect of the bi-level injection erector spinae plane block after breast surgery: A randomized controlled trial. *Agri*. 2019;31(3):132–7.
57. Holas M, Hlásny J, Gajdoš R, Venglarčík M, Šimko P, Schnake KJ, dkk. Does Erector Spinae Plane Block Decrease Analgesia Requirements After Minimal-Invasive Posterior Transpedicular Stabilization in Patients With Vertebral Body Fracture? A Prospective, Randomized, Double-Blind Controlled Study. *Global Spine J*. 2023;
58. Li Y, Li J, Cui X, Chen T, Jiang X. Pre-and Post-operative Variation of Neutrophil-to-lymphocyte Ratio (NLR) Predict Prognosis factor in Rectal Cancer Patients with Radical Primary Tumor Resection: a monoinstitutional retrospective study. 2023; Tersedia pada: <https://doi.org/10.21203/rs.3.rs-2709228/v1>
59. Arnold M, Sierra MS, Laversanne M, Soerjomataram I, Jemal A, Bray F. Global patterns and trends in colorectal cancer incidence and mortality. *Gut*. 1 April 2017;66(4):683–91.
60. Boshier PR, Sayers R, Hadjiminias DJ, Mackworth-Young C, Cleator S, Leff DR. Systemic inflammatory response syndrome in a patient diagnosed with high grade

- inflammatory triple negative breast cancer: A case report of a potentially rare paraneoplastic syndrome. *Exp Hematol Oncol*. 2016;5(1).
61. Fisher A, Srikusalanukul W, Fisher L, Smith P. The neutrophil to lymphocyte ratio on admission and short-term outcomes in orthogeriatric patients. *Int J Med Sci*. 5 Juli 2016;13(8):588–602.
 62. Guthrie GJK, Charles KA, Roxburgh CSD, Horgan PG, McMillan DC, Clarke SJ. The systemic inflammation-based neutrophil–lymphocyte ratio: Experience in patients with cancer. *Crit Rev Oncol Hematol* [Internet]. 2013;88(1):218–30. Tersedia pada: <https://www.sciencedirect.com/science/article/pii/S104084281300070X>
 63. Li HF, Shen QH, Zhou XY, Shen X. Analgesic effects of erector spinae plane block for patients after breast surgery: a systematic review and meta-analysis. *Journal of International Medical Research*. 2021;49(3).
 64. Arigami T, Uenosono Y, Matsushita D, Yanagita S, Uchikado Y, Kita Y, dkk. Combined fibrinogen concentration and neutrophil-lymphocyte ratio as a prognostic marker of gastric cancer. *Oncol Lett*. 1 Februari 2016;11(2):1537–44.
 65. Palaj J, Kečkėš Š, Marek V, Dyttert D, Waczulíková I, Durdík Š. Fibrinogen levels are associated with lymph node involvement and overall survival in gastric cancer patients. *Anticancer Res*. 1 Februari 2018;38(2):1097–104.
 66. Ferrucci PF, Gandini S, Battaglia A, Alfieri S, Di Giacomo AM, Giannarelli D, dkk. Baseline neutrophil-to-lymphocyte ratio is associated with outcome of ipilimumab-treated metastatic melanoma patients. *Br J Cancer*. 9 Juni 2015;112(12):1904–10.
 67. Capone M, Giannarelli D, Mallardo D, Madonna G, Festino L, Grimaldi AM, dkk. Baseline neutrophil-to-lymphocyte ratio (NLR) and derived NLR could predict overall survival in patients with advanced melanoma treated with nivolumab. *J Immunother Cancer*. 16 Juli 2018;6(1).
 68. Shindo Y, Hazama S, Tsunedomi R, Suzuki N, Nagano H. Novel biomarkers for personalized cancer immunotherapy. *Cancers (Basel)*. 1 September 2019;11(9).
 69. Ishihara M, Ochiai R, Haruyama T, Sakamoto T, Tanzawa S, Honda T, dkk. Pretreatment neutrophil-to-lymphocyte ratio predicts treatment efficacy and prognosis of cytotoxic anticancer drugs, molecular targeted drugs, and immune checkpoint inhibitors in patients with advanced non-small cell lung cancer. *Transl Lung Cancer Res*. 1 Januari 2021;10(1):221–32.
 70. Pinato DJ, Stavraka C, Flynn MJ, Forster MD, O’Cathail SM, Seckl MJ, dkk. An inflammation based score can optimize the selection of patients with advanced cancer considered for early phase clinical trials. *PLoS One*. 7 Januari 2014;9(1).
 71. Chen L, Yan Y, Zhu L, Cong X, Li S, Song S, dkk. Systemic immune–inflammation index as a useful prognostic indicator predicts survival in patients with advanced gastric cancer treated with neoadjuvant chemotherapy. *Cancer Manag Res*. 14 Desember 2017;9:849–67.
 72. Yao Y, Li H, He Q, Chen T, Wang Y, Zheng X. Efficacy of ultrasound-guided erector spinae plane block on postoperative quality of recovery and analgesia after modified

radical mastectomy: randomized controlled trial. *Regional Anesthesia & Pain Medicine* [Internet]. 1 Januari 2020;45(1):5. Tersedia pada: <http://rapm.bmj.com/content/45/1/5.abstract>

73. Liu M jun, Zhou X yan, Yao Y bing, Shen X, Wang R, Shen Q hong. Postoperative Analgesic Efficacy of Erector Spinae Plane Block in Patients Undergoing Lumbar Spinal Surgery: A Systematic Review and Meta-Analysis. Vol. 10, *Pain and Therapy*. Adis; 2021. hlm. 333–47.

LAMPIRAN

Lampiran 1. Persetujuan Etik Penelitian

 <p>UNIVERSITAS GUNUNG JATI P. I. N. T. A. R</p>		<p>Kampus 4 : Jl. Taman Pemuda No 2 Lapangan Bima Kota Cirebon Kampus 3 : Jl. Terusan Pemuda No.1 A Cirebon 45132 (0231) 483928 (hunting) Fax. (0231) 488923 Website : fkunswagati.ac.id E-mail : fkunswagati01@gmail.com</p>
<p>KETERANGAN LAYAK ETIK <i>DESCRIPTION OF ETHICAL APPROVAL</i> "ETHICAL APPROVAL"</p>		
<p>No.182/EC/FKUGJ/IX/2023</p>		
<p>Protokol penelitian versi 2 yang diusulkan oleh : <i>The research protocol proposed by</i></p>		
<p>Peneliti utama <i>Principal In Investigator</i></p>	<p>: Aris Sunaryo, dr., SpAn-TI, MKes</p>	
<p>Nama Institusi <i>Name of the Institution</i></p>	<p>: Departemen Ilmu Anestesi, Perawatan Intensif & Manajemen Nyeri, Fakultas Kedokteran Universitas Hasanuddin</p>	
<p>Dengan judul: <i>Title</i></p>		
<p>"Efek Blok Erector Spinae Plane (ESP) Untuk Mengurangi Nyeri, Penggunaan Opioid, Insidensi Mual-Muntah Dan Lama Rawat Pasca Pembedahan Modified Radikal Mastectomy"</p>		
<p><i>"Effects of erector spinae plane (ESP) block to reduce pain, opioid use, incidence of nausea-vomiting and length of stay after surgery modified radical mastectomy"</i></p>		
<p>Dinyatakan layak etik sesuai 7 (tujuh) Standar WHO 2011, yaitu 1) Nilai Sosial, 2) Nilai Ilmiah, 3) Pemerataan Beban dan Manfaat, 4) Risiko, 5) Bujukan/Eksploitasi, 6) Kerahasiaan dan Privacy, dan 7) Persetujuan Setelah Penjelasan, yang merujuk pada Pedoman CIOMS 2016. Hal ini seperti yang ditunjukkan oleh terpenuhinya indikator setiap standar.</p>		
<p><i>Declared to be ethically appropriate in accordance to 7 (seven) WHO 2011 Standards, 1) Social Values, 2) Scientific Values, 3) Equitable Assessment and Benefits, 4) Risks, 5) Persuasion/Exploitation, 6) Confidentiality and Privacy, and 7) Informed Consent, referring to the 2016 CIOMS Guidelines. This is as indicated by the fulfillment of the indicators of each standard.</i></p>		
<p>Pernyataan Laik Etik ini berlaku selama kurun waktu tanggal 04 September 2023 sampai dengan tanggal 04 September 2024.</p>		
<p><i>This declaration of ethics applies during the period September 04, 2023 until September 04, 2024.</i></p>		
	<p>September 04, 2023 <i>Professor and Chairperson,</i></p>  <p>Atik Sutisna, dr., Sp. An</p>	



**UGJ UNIVERSITAS
SWADAYA
GUNUNG
JATI**
P. I . N . T . A . R



Kampus 4 : Jl. Taman Pemuda No 2 Lapangan Birma Kota Cirebon
Kampus 3 : Jl. Terusan Pemuda No.1 A Cirebon 45132
(0231) 483928 (hunting) Fax. (0231) 488923
Website : fkunswagati.ac.id | E-mail : fkunswagati01@gmail.com

KETERANGAN ADDENDUM

182/ADD/FKUGJ/VI/2024

Permohonan addendum yang diusulkan oleh:

Peneliti Utama : ARIS SUNARYO, dr., SpAn., Mkes.
Nama Institusi : RSUD WALED
Dengan Judul : Efek Blok Erector Spinae Plane (ESP) Untuk Mengurangi Nyeri, Penggunaan Opioid, Insidensi Mual-Muntah Dan Lama Rawat Pasca Pembedahan Modified Radikal Mastectomy
No. Ethical Clearance : No. 182/EC/FKUGJ/IX/2023
Nomor Protokol : 0023213274212272023070300001
Versi Protokol : 2
Perubahan : Peneliti menambahkan NLR sebagai biomarker dalam menentukan perkembangan penyakit dan menghilangkan insidensi PONV dalam protokol penelitian

dinyatakan layak etik dan perubahan tersebut masih sesuai dengan prinsip-prinsip yang dinyatakan dalam Deklarasi Helsinki 1975 yang diamandemen di Seoul 2008 dan Standar Etik Penelitian Dan Pengembangan Kesehatan Nasional Tahun 2017, Komisi Etik Penelitian dan Pengembangan Kesehatan Nasional (KEPPKN) Kementerian Kesehatan Republik Indonesia

Ditetapkan di Cirebon, 28-06-2024

Komite Etik Penelitian Kesehatan Fakultas Kedokteran UGJ

Ketua

Atik Sutisna, dr., Sp.An.



Lampiran 2. Sertifikat Good Clinical Practice (GCP).



Lampiran 3 Daftar Riwayat Hidup



Nama	Aris Sunaryo	
NPM	C018202007	
Alamat	Jl. Melati No 23 Wiratama Tuparev Kedawung Kab. Cirebon.	
Riwayat Pendidikan	S1-Profesi: Fakultas Kedokteran Universitas Padjadjaran Bandung.	Agustus 1991 – September 1997
	PPDS-1: Anestesiologi dan Reanimasi Terapi Intensif, Fakultas Kedokteran Universitas Padjadjaran Bandung.	September 2005 – Januari 2009
	S2-Magister Kesehatan: Konsentrasi Ilmu Anestesiologi (Program Double Degree)	September 2007 – Januari 2009
Riwayat Pekerjaan	PTT Puskesmas Manyampa dan Bontotiro Bulukumba Sulawesi Selatan	Juli 1998-Juni 2001
	ASN RSUD Waled Kab. Cirebon.	Desember 2012 – sekarang.
	Penanggung Jawab Klinik Nyeri RSUD Waled dan RS Pelabuhan IHC Cirebon.	Januari 2022 – sekarang.
