

## DAFTAR PUSTAKA

1. Park SY, An HS, Moon SH, et al. Neuropathic pain components in patients with lumbar spinal stenosis. *Yonsei Med J.* 2015;56(4):1044-1050. doi:10.3349/ymj.2015.56.4.1044
2. Siebert E, Prüss H, Klingebiel R, Failli V, Einhäupl KM, Schwab JM. Lumbar spinal stenosis: Syndrome, diagnostics and treatment. *Nat Rev Neurol.* 2009;5(7):392-403. doi:10.1038/nrneurol.2009.90
3. Song KS, Cho JH, Hong JY, et al. Neuropathic pain related with spinal disorders: A systematic review. *Asian Spine J.* 2017;11(4):661-674. doi:10.4184/asj.2017.11.4.661
4. Wu A-M, Zou F, Cao Y, et al. Lumbar spinal stenosis: an update on the epidemiology, diagnosis and treatment. *AME Med J.* 2017;(7):63-63. doi:10.21037/amj.2017.04.13
5. Cheung PWH, Hu Y, Cheung JPY. Novel compression rat model for developmental spinal stenosis. *J Orthop Res.* 2019;37(5):1090-1100. doi:10.1002/jor.24221
6. Du W, Deng Y, Jiang R, Tong L, Li R, Jiang X. Clemastine Enhances Myelination, Delays Axonal Loss and Promotes Functional Recovery in Spinal Cord Injury. *Neurochem Res.* 2022;47(2):503-515. doi:10.1007/s11064-021-03465-0
7. Colloca L, Ludman T, Bouhassira D, et al. Neuropathic pain. *Nat Rev Dis Prim.* 2017;3:1-20. doi:10.1038/nrdp.2017.2
8. Song G, Yang Z, Guo J, Zheng Y, Su X, Wang X. Interactions Among lncRNAs/circRNAs, miRNAs, and mRNAs in Neuropathic Pain. *Neurotherapeutics.* 2020;17(3):917-931. doi:10.1007/s13311-020-00881-y
9. Tramullas M, Francés R, De La Fuente R, et al. MicroRNA-30c-5p modulates neuropathic pain in rodents. *Sci Transl Med.* 2018;10(453). doi:10.1126/scitranslmed.aao6299
10. Lurie J, Tomkins-lane C. Management of lumbar spinal stenosis. Published online 2016. doi:10.1136/bmj.h6234
11. Chen CLH, Ikram K, Anqi Q, Yin WT, Chen A, Venketasubramanian N. The NeuroAiD II (MLC901) in vascular cognitive impairment study (NEURITES) for the NEURITE investigators. *Cerebrovasc Dis.* 2013;35(SUPPL.1):23-29. doi:10.1159/000346234
12. Gandin C, Widmann C, Lazdunski M, Heurteaux C. MLC901 Favors Angiogenesis and Associated Recovery after Ischemic Stroke in Mice. *Cerebrovasc Dis.* 2016;42(1-2):139-154. doi:10.1159/000444810
13. Vranken JH. Neuropathic pain following spinal cord injury. Published online 2018:145-155.
14. Buchheit T, Huh Y, Maixner W, Cheng J, Ji R. Neuroimmune modulation of pain and regenerative pain medicine. 2020;130(5).
15. WHO. 9290611103\_En.Pdf. Published online 1993:35.
16. Glassman DM, Magnusson E, Ma JA, Bellabarba C, Bransford RJ. PT US CR. *Spine J.* Published online 2018. doi:10.1016/j.spinee.2018.10.015
17. Bindal S, Bindal SK, Bindal M, Bindal AK. Noninstrumented Lumbar Fusion with Bone Morphogenetic Proteins for Spinal Stenosis with Spondylolisthesis in the Elderly. *World Neurosurg.* 2019;126:e1427-e1435. doi:10.1016/j.wneu.2019.02.251
18. Tang C, Moser FG, Reveille J, Bruckel J, Weisman MH. Cauda Equina Syndrome in Ankylosing Spondylitis: Challenges in Diagnosis, Management, and Pathogenesis. Published online 2019. doi:10.3899/jrheum.181259
19. Lee BH, Moon S, Suk K, Kim H, Yang J, Lee H. Lumbar Spinal Stenosis: Pathophysiology and Treatment Principle: A Narrative Review. Published online 2020:682-693.
20. Raja SN, Carr DB, Cohen M, et al. compromises. 2021;161(9):1976-1982. doi:10.1097/j.pain.0000000000001939.The
21. Goethe- JW. Update on the pathobiology of neuropathic pain. 2008;5(6):799-818.
22. Simpson DM, Smith BH, Svensson P, Vlaeyen JWS. HHS Public Access. 2020;160(1):53-59. doi:10.1097/j.pain.0000000000001365.The
23. Dogrul A, Gardell LR, Ossipov MH, Tulunay FC, Lai J, Porreca F. Reversal of experimental neuropathic pain by T-type calcium channel blockers. 2003;105:159-168. doi:10.1016/S0304-

- 3959(03)00177-5
24. Baron R, Binder A, Attal N, Casale R, Dickenson AH, Treede R. Neuropathic low back pain in clinical practice. 2016;20:861-873. doi:10.1002/ejp.838
  25. Austin PJ, Moalem-Taylor G. Pathophysiology of neuropathic pain: Inflammatory mediators. *Neuropathic Pain Causes, Manag Underst*. Published online 2011:77-89. doi:10.1017/CBO9781139152211.008
  26. Paper C. Does a neuroimmune interaction contribute to the genesis of painful peripheral neuropathies ? 1999;96(July):7737-7738.
  27. Pain T. COMPARISON OF GENE EXPRESSION PROFILES. 2006;(1):401-414.
  28. Scholz J, Woolf CJ. GLIA AND DISEASE The neuropathic pain triad : neurons , immune cells and glia. 2007;10(11):1361-1368. doi:10.1038/nrn1992
  29. Marchand F, Perretti M, McMahon SB. FOCUS ON PAIN ROLE OF THE IMMUNE SYSTEM IN CHRONIC PAIN. 2005;6(July):521-532. doi:10.1038/nrn1700
  30. Deleo JA, Winkelstein BA, Pain P. Physiology of Chronic Spinal Pain Syndromes From Animal Models to Biomechanics. 27(22):2526-2537.
  31. Å BAW. Mechanisms of central sensitization , neuroimmunology & injury biomechanics in persistent pain : implications for musculoskeletal disorders. 2004;14:87-93. doi:10.1016/j.jelekin.2003.09.017
  32. Rahman I. Sejarah Immunologi. *Angew Chemie Int Ed* 6(11), 951–952. 2020;(Mi):5-24.
  33. Mou C, Li Z, Liu N, Ni L, Xu Y. Low level TGF-  $\beta$  1-treated Umbilical mesenchymal stem cells attenuates microgliosis and neuropathic pain in chronic constriction injury by exosomes / lncRNA UCA1 / miR-96-5p / FOXO3a. *Biochem Biophys Reports*. 2023;34(January):101477. doi:10.1016/j.bbrep.2023.101477
  34. Ye Z, Wei J, Zhan C, Hou J. Role of Transforming Growth Factor Beta in Peripheral Nerve Regeneration : Cellular and Molecular Mechanisms. 2022;16(June). doi:10.3389/fnins.2022.917587
  35. Echeverry S, Shi XQ, Haw A, Liu H. Transforming growth factor-  $\beta$  1 impairs neuropathic pain through pleiotropic effects. 2009;18:1-18. doi:10.1186/1744-8069-5-16
  36. Sun X, Wang C, Wu J, Chen X, He H. Effect of TGF-  $\beta$  1-Mediated Exercise Analgesia in Spared Nerve Injury Mice. 2022;2022.
  37. Kreiner DS, Hwang SW, Easa JE, et al. An evidence-based clinical guideline for the diagnosis and treatment of lumbar disc herniation with radiculopathy. *Spine J*. 2014;14(1):180-191. doi:10.1016/j.spinee.2013.08.003
  38. Fortin JD, Wheeler MT. Imaging in Lumbar Spinal Stenosis. 2004;7(1):133-139.
  39. Veterans B, Hospital A. Pathogenesis , presentation , and treatment of lumbar spinal stenosis associated with coronal or sagittal spinal deformities. 2003;14(1):1-9.
  40. Huang RY, Bi WL, Griffith B, et al. Imaging and diagnostic advances for intracranial meningiomas. *Neuro Oncol*. 2019;21(Suppl 1):i44-i61. doi:10.1093/neuonc/noy143
  41. Htwe O, Baharudin A, Gan R. Spinal Cord Injury — Assessing Tolerability and Use of Combined Rehabilitation and NeuroAiD ( SATURN Study ) : Protocol of An Exploratory Study In Assessing the Safety and Efficacy of NeuroAiD Amongst People Who Sustain Severe Spinal Cord Injury. 2016;(November 2022). doi:10.2196/resprot.6275
  42. Quintard H, Borsotto M, Veyssiere J, et al. Neuropharmacology MLC901 , a Traditional Chinese Medicine protects the brain against global ischemia. *Neuropharmacology*. 2011;61(4):622-631. doi:10.1016/j.neuropharm.2011.05.003
  43. De P. MLC901 , A TRADITIONAL CHINESE MEDICINE INDUCES NEUROPROTECTIVE AND NEUROREGENERATIVE BENEFITS AFTER TRAUMATIC BRAIN INJURY IN RATS. *Neuroscience*. 2014;277:72-86. doi:10.1016/j.neuroscience.2014.06.047
  44. Suwanwela NC, Chen LH, Fan C, Chua CL, Silva HA De, Hiyadan HB. Effect of Combined Treatment with MLC601 ( NeuroAiD TM ) and Rehabilitation on Post-Stroke Recovery : The CHIMES and CHIMES-E Studies. 2018;117597(05):82-88. doi:10.1159/000492625
  45. Theadom A, Id O, Article O. NeuroAiD II. :0-3. doi:10.1111/ene.13653
  46. Heurteaux C, Widmann C, Quintard H, et al. NeuroAiD : Properties for Neuroprotection and Neurorepair. 2013;35(suppl 1):1-7. doi:10.1159/000346228
  47. Maati HMO, Borsotto M, Chatelain F, Widmann C, Lazdunski M, Heurteaux C. Neuropharmacology Activation of ATP-sensitive potassium channels as an element of the neuroprotective effects of the Traditional Chinese Medicine MLC901 against oxygen glucose deprivation. *Neuropharmacology*. 2012;63(4):692-700. doi:10.1016/j.neuropharm.2012.05.035

48. Heurteaux C, Gandin C, Borsotto M, et al. Neuropharmacology Neuroprotective and neuroproliferative activities of NeuroAid ( MLC601 , MLC901 ), a Chinese medicine , in vitro and in vivo. *Neuropharmacology*. 2010;58(7):987-1001. doi:10.1016/j.neuropharm.2010.01.001
49. Lin J, Wang Q, Zhou S, Xu S, Yao K. Biomedicine & Pharmacotherapy Tetramethylpyrazine : A review on its mechanisms and functions. *Biomed Pharmacother*. 2022;150:113005. doi:10.1016/j.biopha.2022.113005
50. Widmann C, Gandin C, Lazdunski M, Heurteaux C. The Traditional Chinese Medicine MLC901 inhibits inflammation processes after focal cerebral ischemia. *Sci Rep*. 2018;(March):1-15. doi:10.1038/s41598-018-36138-0
51. Pemberian P, Terhadap MLC, B KT-, et al. NYERI NEUROPATIK PADA RAT SPRAGUE DAWLEY EFFECT OF MLC901 ON MIR30C-5P EXPRESSION , TGF- B1 LEVEL , VEGFR1 LEVEL , VEGF LEVEL , DEGREE OF AXON DEMYELINATION AND CHANGES IN NEUROPATHIC PAIN BEHAVIOR IN RAT SPRAGUE DAWLEY Program Studi Ilmu Kedokteran Fakul. Published online 2023.
52. Montague-Cardoso K, Malcangio M. Changes in blood–spinal cord barrier permeability and neuroimmune interactions in the underlying mechanisms of chronic pain. *Pain Reports*. 2021;6(1):1-7. doi:10.1097/PR9.0000000000000879
53. Fan B, Wei Z, Yao X, et al. Microenvironment Imbalance of Spinal Cord Injury. *Cell Transplant*. 2018;27(6):853-866. doi:10.1177/0963689718755778
54. Meacham K, Shepherd A, Mohapatra DP, Haroutounian S. Neuropathic Pain: Central vs. Peripheral Mechanisms. *Curr Pain Headache Rep*. 2017;21(6). doi:10.1007/s11916-017-0629-5
55. Vidal PM, Lemmens E, Dooley D, Hendrix S. The role of “ anti-inflammatory” cytokines in axon regeneration. *Cytokine Growth Factor Rev*. 2013;24(1):1-12. doi:10.1016/j.cytogfr.2012.08.008
56. Priyanto B, Asadul A, Hatta M, Bukhari A, Muhammad R. Effect of MLC901 on MIR30C – 5P expression , TGF- B expression , VEGF receptor expression , degree of axon demyelination and changes in neuropathic pain behaviour in experimental animals experiencing neuropathic pain with circumferential spinal stenosis m. *Ann Med Surg*. 2022;81(August):104489. doi:10.1016/j.amsu.2022.104489
57. Rubin DI, Hermann RC. *PERIPHERAL NERVE INJURY*. First Edit. Elsevier Inc. doi:10.1016/B978-0-323-03354-1.50109-7
58. Grant GA, Goodkin R, Kliot M. Evaluation and Surgical Management of Peripheral Nerve Problems. 1999;44.
59. Stemkowski PL, Smith PA. An overview of animal models for neuropathic pain. Published online 2018.
60. Kikuchi MS/ÆS. Spinal stenosis : assessment of motor function , VEGF expression and angiogenesis in an experimental model in the rat. Published online 2007:1913-1918. doi:10.1007/s00586-007-0394-y
61. Gaudet AD, Popovich PG, Ramer MS. Wallerian degeneration : Gaining perspective on inflammatory events after peripheral nerve injury. *J Neuroinflammation*. 2011;8(1):110. doi:10.1186/1742-2094-8-110
62. Venkatasubramanian C, Kleinman JT, Fischbein NJ, et al. Natural History and Prognostic Value of Corticospinal Tract Wallerian. :1-8. doi:10.1161/JAHA.113.000090
63. Beirowski B, Adalbert R, Wagner D, et al. The progressive nature of Wallerian degeneration in wild-type and slow Wallerian degeneration (WldS) nerves. *BMC Neurosci*. 2005;6:1-27. doi:10.1186/1471-2202-6-6
64. Mizisin AP, Weerasuriya A. Homeostatic regulation of the endoneurial microenvironment during development, aging and in response to trauma, disease and toxic insult. *Acta Neuropathol*. 2011;121(3):291-312. doi:10.1007/s00401-010-0783-x
65. Griffin JW, Thompson WJ. Biology and pathology of nonmyelinating Schwann cells. *Glia*. 2008;56(14):1518-1531. doi:10.1002/glia.20778
66. Pineau I, Lacroix S. Endogenous signals initiating inflammation in the injured nervous system. *Glia*. 2009;57(4):351-361. doi:10.1002/glia.20763
67. Perry VH, Tsao JW, Fearn S, Brown MC. Radiation-induced Reductions in Macrophage Recruitment Have Only Slight Effects on Myelin Degeneration in Sectioned Peripheral Nerves of Mice. 1995;7(July 1994).
68. Colognato H, Feltri ML. Human diseases reveal novel roles for neural laminins. 2005;28(9).

- doi:10.1016/j.tins.2005.07.004
69. Fricker FR, Lago N, Balarajah S, et al. Axonally Derived Neuregulin-1 Is Required for Remyelination and Regeneration after Nerve Injury in Adulthood. 2011;31(9):3225-3233. doi:10.1523/JNEUROSCI.2568-10.2011
  70. Xue F, Wei Y, Chen Y. A rat model for chronic spinal nerve root compression. Published online 2014;435-446. doi:10.1007/s00586-013-2990-3
  71. Mappangara S, Djais AI. pada platelet rich plasma yang digunakan untuk regenerasi tulang dan jaringan periodontal ( Correlation of blood quality with concentration of transforming growth. 2014;13(2):80-85.
  72. Wulandari P, Hutagalung M, Perdanakusuma D. Deteksi Kadar Transforming Growth Factor (Tgf-B) Pada Luka Akut. *J Rekonstruksi dan Estet*. 2021;6(1):1. doi:10.20473/jre.v6i1.28225