DAFTAR PUSTAKA

Akter, S. (2022) 'Non-alcoholic Fatty Liver Disease and Steatohepatitis: Risk Factors and Pathophysiology', *Middle East Journal of Digestive Diseases*, 14(2), pp. 167–181. Available at: https://doi.org/10.34172/mejdd.2022.270.

Al Mahtab, M. *et al.* (2022) "Gender Differences in Nonalcoholic Fatty Liver Disease," *Euroasian Journal of Hepato-Gastroenterology*, 12(S1), pp. S19–S25. Available at: https://doi.org/10.5005/jp-journals-10018-1370.

Amalia M, Hidayati PH, Yanti AKE, Vitayani S, Gayatri W. Karakteristik Pasien Sirosis Hepatis. *UMI Med J*. 2023;8(1):53-61. file:///C:/Users/julia/Downloads/244-Article Text-1864-1-10-20230627.pdf

Anjani, D.A.V.N. (2023) 'Non-alcoholic Fatty Liver Disease: Diagnosis and Treatment', *Jurnal Biologi Tropis*, 23(3), pp. 213–224. Available at: https://doi.org/10.29303/jbt.v23i3.5016.

Azarkar, G. *et al.* (2019) ' Analysis Of Risk Factors For Nonalcoholic Fatty-Liver Disease In Hepatitis B Virus Infection: A Case–Control Study ', *Hepatic Medicine: Evidence and Research*, Volume 11, pp. 153–158. Available at: https://doi.org/10.2147/HMER.S211106.

Balakrishnan, M, et al. Women have Lower Risk of Nonalcoholic Fatty Liver Disease but Higher Risk of Progression vs Men: A Systematic Review and Meta-analysis. Clin Gastroenterol Hepatol. 2020 Apr 30;19(1):61–71.e15. doi: 10.1016/j.cgh.2020.04.067

Bera, C., Hamdan-Perez, N. and Patel, K. (2024) 'Non-Invasive Assessment of Liver Fibrosis in Hepatitis B Patients', *Journal of Clinical Medicine*, 13(4), p. 1046. Available at: https://doi.org/10.3390/jcm13041046.

Brown, G.T. and Kleiner, D.E. (2016) 'Histopathology of nonalcoholic fatty liver disease and nonalcoholic steatohepatitis', *Metabolism*, 65(8), pp. 1080–1086. Available at: https://doi.org/10.1016/j.metabol.2015.11.008.

Castera L, et al. (2008). Non-invasive evaluation of liver fibrosis using transient elastography. Journal of Hepatology 48 (2008) 835–847

Castera L, Vergniol J, Foucher J, et al. Prospective comparison of transient elastography, Fibrotest, APRI, and liver biopsy for the assessment of fibrosis in chronic hepatitis C. Gastroenterology. 2005;128:343-50.

Dalbeni, A. *et al.* (2022a) 'Platelets in Non-alcoholic Fatty Liver Disease', *Frontiers in Pharmacology*, 13. Available at: https://doi.org/10.3389/fphar.2022.842636.

Dalbeni, A. *et al.* (2022b) 'Platelets in Non-alcoholic Fatty Liver Disease', *Frontiers in Pharmacology*, 13. Available at: https://doi.org/10.3389/fphar.2022.842636.

Ferraioli G. Review of Liver Elastography Guidelines. *J Ultrasound Med*. 2019;38(1):9-14. doi:10.1002/jum.14856

Geetakhumari et al. 2022. Accuracy of Ultrasonography vs. Elastography in Patients With Non-alcoholic Fatty Liver Disease: A Systematic Review. Cureus. Oct 6;14(10):e29967. doi: 10.7759/cureus.29967. eCollection 2022 Oct.

Guo, X. *et al.* (2022) 'Non-Alcoholic Fatty Liver Disease (NAFLD) Pathogenesis and Natural Products for Prevention and Treatment', *International Journal of Molecular Sciences*, 23(24), p. 15489. Available at: https://doi.org/10.3390/ijms232415489.

Huh, Cho and Nam, (2022). Recent Epidemiology and Risk Factors of Nonalcoholic Fatty Liver Disease. J Obes Metab Syndr. 2022 Mar 30;31(1):17-27 doi: 10.7570/jomes22021

Jiang, D. *et al.* (2024) 'Predicting hepatocellular carcinoma: A new non-invasive model based on shear wave elastography', *World Journal of Gastroenterology*, 30(25), pp. 3166–3178. Available at: https://doi.org/10.3748/wjg.v30.i25.3166.

Jiang, Qin, Xu. (2025). Feasibility of shear wave elastography for assessing steatosis in early-stage non-alcoholic fatty liver disease. PLoS ONE. DOI:10.1371/journal.pone.0324637

Khov, N. (2014) 'Bedside ultrasound in the diagnosis of nonalcoholic fatty liver disease', *World Journal of Gastroenterology*, 20(22), p. 6821. Available at: https://doi.org/10.3748/wjg.v20.i22.6821.

Kim, J.W. *et al.* (2022) "Ultrasonographic index for the diagnosis of non-alcoholic steatohepatitis in patients with non-alcoholic fatty liver disease," *Quantitative Imaging in Medicine and Surgery*, 12(3), pp. 1815–1829. Available at: https://doi.org/10.21037/qims-21-895.

Ko, E., Yoon, E.L. and Jun, D.W. (2023) 'Risk factors in nonalcoholic fatty liver disease', *Clinical and Molecular Hepatology*, 29(Suppl), pp. S79–S85. Available at: https://doi.org/10.3350/cmh.2022.0398.

Kou, M.-Q., Xu, B.-Q. and Liu, H.-T. (2024) 'Multimodal imaging in the diagnosis of bone giant cell tumors: A retrospective study', *World Journal of Clinical Cases*, 12(16), pp. 2722–2728. Available at: https://doi.org/10.12998/wjcc.v12.i16.2722.

Kumada, T. *et al.* (2022) 'Liver Stiffness Measurements by 2D Shear-Wave Elastography: Effect of Steatosis on Fibrosis Evaluation', *American Journal of Roentgenology*, 219(4), pp. 604–612. Available at: https://doi.org/10.2214/AJR.22.27656.

Le et al. 2023. Global incidence of non-alcoholic fatty liver disease: A systematic review and meta-analysis of 63 studies and 1,201,807 persons. J Hepatol. 2023

Aug;79(2):287-295. doi: 10.1016/j.jhep.2023.03.040. Epub 2023 Apr 9.

Lee, J.-H. *et al.* (2023) "Gender Differences in the Risk for Incident Non-Alcoholic Fatty Liver Disease According to the Transition of Abdominal Obesity Status: A 16-Year Cohort Study," *Nutrients*, 15(13), p. 2880. Available at: https://doi.org/10.3390/nu15132880.

Lin, M. *et al.* (2020) 'Differentiation of endometrial adenocarcinoma from adenocarcinoma of cervix using kinetic parameters derived from DCE-MRI', *European Journal of Radiology*, 130, p. 109190. Available at: https://doi.org/10.1016/j.ejrad.2020.109190.

Lin, Y. *et al.* (2022) 'Age patterns of nonalcoholic fatty liver disease incidence: heterogeneous associations with metabolic changes', *Diabetology & Metabolic Syndrome*, 14(1), p. 181. Available at: https://doi.org/10.1186/s13098-022-00930-w.

Lonardo et al. (2019). Sex Differences in Nonalcoholic Fatty Liver Disease: State of the Art and Identification of Research Gaps. Hepatology. 2019 Oct;70(4):1457-1469. doi: 10.1002/hep.30626. Epub 2019 Sep 23.

Mahale, AJ. Et al (2018). Clinical relevance of reporting fatty liver on ultrasound in asymptomatic patients during routine health checkups. J Int Med Res 5;46(11):4447–4454. doi: 10.1177/0300060518793039

Malladi, N. *et al.* (2023) 'The role of platelets in non-alcoholic fatty liver disease: From pathophysiology to therapeutics', *Prostaglandins & Other Lipid Mediators*, 169, p. 106766. Available at: https://doi.org/10.1016/j.prostaglandins.2023.106766.

Mitra, S., De, A. and Chowdhury, A. (2020) 'Epidemiology of non-alcoholic and alcoholic fatty liver diseases', *Translational Gastroenterology and Hepatology*, 5, pp. 16–16. Available at: https://doi.org/10.21037/tgh.2019.09.08.

Ozturk, A. *et al.* (2020a) 'Diagnostic Accuracy of Shear Wave Elastography as a Non-invasive Biomarker of High-Risk Non-alcoholic Steatohepatitis in Patients with Non-alcoholic Fatty Liver Disease', *Ultrasound in Medicine & Biology*, 46(4), pp. 972–980. Available at: https://doi.org/10.1016/j.ultrasmedbio.2019.12.020.

Ozturk, A. *et al.* (2020b) 'Diagnostic Accuracy of Shear Wave Elastography as a Non-invasive Biomarker of High-Risk Non-alcoholic Steatohepatitis in Patients with Non-alcoholic Fatty Liver Disease', *Ultrasound in Medicine & Biology*, 46(4), pp. 972–980. Available at: https://doi.org/10.1016/j.ultrasmedbio.2019.12.020.

Pande Made Aditya Saskara, Suryadarma I. *Laporan Kasus Sirosis Hepatis*.

Petzold, G. (2022) 'Role of Ultrasound Methods for the Assessment of NAFLD', *Journal of Clinical Medicine*, 11(15), p. 4581. Available at: https://doi.org/10.3390/jcm11154581.

Pitisuttithum, P. and Treeprasertsuk, S. (2022) 'Nonalcoholic fatty liver disease (NAFLD) among older adults', *Portal Hypertension & Cirrhosis*, 1(3), pp. 184–191. Available at: https://doi.org/10.1002/poh2.31.

Pouwels, S. *et al.* (2022) 'Non-alcoholic fatty liver disease (NAFLD): a review of pathophysiology, clinical management and effects of weight loss', *BMC Endocrine Disorders*, 22(1), p. 63. Available at: https://doi.org/10.1186/s12902-022-00980-1.

Powell, E.E., Wong, V.W.-S. and Rinella, M. (2021) 'Non-alcoholic fatty liver disease', *The Lancet*, 397(10290), pp. 2212–2224. Available at: https://doi.org/10.1016/S0140-6736(20)32511-3.

Qiu, J. *et al.* (2023) "Gender perspective on the association between liver enzyme markers and non-alcoholic fatty liver disease: insights from the general population," *Frontiers in Endocrinology*, 14. Available at: https://doi.org/10.3389/fendo.2023.1302322.

Riazi, K, et al. (2022). The prevalence and incidence of NAFLD worldwide: a systematic review and meta-analysis. The Lancet gastrohepatology. Volume 7, Issue 9p851-861September 2022

Sharma B, John S. *Hepatic Cirrhosis*.; 2024. http://www.ncbi.nlm.nih.gov/pubmed/16255293

Sharpton et al. 2021. Current Concepts, Opportunities, and Challenges of Gut Microbiome-Based Personalized Medicine in Nonalcoholic Fatty Liver Disease. Cell Metab. 2021 Jan 5;33(1):21-32. doi: 10.1016/j.cmet.2020.11.010.

Sigrist RMS, Liau J, Kaffas A El, Chammas MC, Willmann JK. Ultrasound Elastography: Review of Techniques and Clinical Applications. *Theranostics*. 2017;7(5):1303-1329. doi:10.7150/thno.18650

Takaki, A., Kawai, D. and Yamamoto, K. (2014) 'Molecular Mechanisms and New Treatment Strategies for Non-Alcoholic Steatohepatitis (NASH)', *International Journal of Molecular Sciences*, 15(5), pp. 7352–7379. Available at: https://doi.org/10.3390/ijms15057352.

Tarachkova *et al.* (2016) 'Dynamic contrast-enhanced MRI in determining histological type of cervical cancer', *Bulletin of Russian State Medical University*, (4), pp. 27–33. Available at: https://doi.org/10.24075/brsmu.2016-04-04.

Teng, M.L. *et al.* (2023) 'Global incidence and prevalence of nonalcoholic fatty liver disease', *Clinical and Molecular Hepatology*, 29(Suppl), pp. S32–S42. Available at: https://doi.org/10.3350/cmh.2022.0365.

Villani R, et al. 2023. Liver Ultrasound Elastography in Non-Alcoholic Fatty Liver Disease: A State-of-the-Art Summary. Diagnostics (Basel). 2023 Mar 24;13(7):1236. doi: 10.3390/diagnostics13071236.

Volpe, S. *et al.* (2022) 'Once-Weekly Subcutaneous Semaglutide Improves Fatty Liver Disease in Patients with Type 2 Diabetes: A 52-Week Prospective Real-Life Study', *Nutrients*, 14(21). Available at: https://doi.org/10.3390/nu14214673.

Xie, L.-T. *et al.* (2018) 'Quantitative and noninvasive assessment of chronic liver diseases

using two-dimensional shear wave elastography', *World Journal of Gastroenterology*, 24(9), pp. 957–970. Available at: https://doi.org/10.3748/wjg.v24.i9.957.

Yoon, J.S., Lim, K.J. and Hwang, I.T. (2023) 'Usefulness of two-dimensional shear wave elastography in the assessment of non-alcoholic fatty liver disease in children and adolescents', *Scientific Reports*, 13(1), p. 10062. Available at: https://doi.org/10.1038/s41598-023-37281-z.

Younassi, Zubair and Henry Linda, (2022), Fatty Liver Through the Ages: Nonalcoholic Steatohepatitis. Endocr Pract. 2022 Feb;28(2):204-213. doi: 10.1016/j.eprac.2021.12.010.

Zhang, T. *et al.* (2021) 'APS (Age, Platelets, 2D Shear-Wave Elastography) Score Predicts Hepatocellular Carcinoma in Chronic Hepatitis B', *Radiology*, 301(2), pp. 350–359. Available at: https://doi.org/10.1148/radiol.2021204700.

Zhong, H. (2024) 'Non-alcoholic fatty liver disease: pathogenesis and models', *American Journal of Translational Research*, 16(2), pp. 387–399. Available at: https://doi.org/10.62347/KMSA5983.

KEMENTERIAN PENDIDIKAN, KEBUDAYAAN, RISET DAN TEKNOLOGI
UNIVERSITAS HASANUDDIN FAKULTAS KEDOKTERAN
KOMITE ETIK PENELITIAN UNIVERSITAS HASANUDDIN
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 : 571/UN4.6.4.5.31/ PP36/ 2025

Tanggal: 7 Agustus 2025

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

No Protokol	UH25070557	No Sponsor	
Peneliti Utama	**dr. Kurniati**	Sponsor	
Judul Peneliti	KESESUAIAN GRADING FATTY LIVER BERDASARKAN GAMBARAN ULTRASONOGRAPHY DENGAN GRADING FIBROSIS BERDASARKAN SHEAR WAVE ELASTOGRAPHY PADA PASIEN DENGAN NON-ALCOHOLIC FATTY LIVER DISEASE		
No Versi Protokol	**1**	Tanggal Versi	**25 Juli 2025**
No Versi PSP		Tanggal Versi	
Tempat Penelitian	RSUP Wahidin Sudirohusodo Makassar		
Jenis Review	☐ Exempted ☒ Expedited ☐ Fullboard Tanggal	Masa Berlaku **7 Agustus 2025** sampai **7 Agustus 2026**	Frekuensi review lanjutan
Ketua KEP Universitas Hasanuddin	**Prof. dr. Muh Nasrum Massi,PhD,SpMK, Subsp. Bakt(K)**	Tanda tangan	
Sekretaris KEP Universitas Hasanuddin	**dr. Firdaus Hamid, PhD, SpMK(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