

DAFTAR PUSTAKA

- ACC/AHA. (2018). Guideline on the Management of Blood Cholesterol. *American College of Cardiology/American Heart Association*. <https://doi.org/10.1161/cir.0000000000000625>
- ADA. (2019). 10. Cardiovascular disease and risk management: Standards of medical care in diabetes 2019. *Diabetes Care*. <https://doi.org/10.2337/dc19S010>
- Al-Salameh, A., Chanson, P., Bucher, S., Ringa, V., & Becquemont, L. (2019). Cardiovascular Disease in Type 2 Diabetes: A Review of Sex-Related Differences in Predisposition and Prevention. *Mayo Clinic Proceedings*, *94*(2), 287–308. <https://doi.org/10.1016/j.mayocp.2018.08.007>
- Alatab, S., Fakhrzadeh, H., Sharifi, F., Mostashfi, A., Mirarefin, M., Badamchizadeh, Z., & Tagalizadehkhooob, Y. (2014). Impact of hypertension on various markers of subclinical atherosclerosis in early type 2 diabetes. *Journal of Diabetes and Metabolic Disorders*, *13*(1), 1–8. <https://doi.org/10.1186/2251-6581-13-24>
- Aouacheri, O., Saka, S., Krim, M., Messaadia, A., & Maldi, I. (2015). The Investigation of the Oxidative Stress-Related Parameters in Type2 Diabetes Mellitus. *Canadian Journal of Diabetes*, *39*(1), 44–49. <https://doi.org/10.1016/j.jcjd.2014.03.002>
- Arshad, A. R., Tipu, H. N., & Paracha, A. I. (2016). The impact of hypertension on lipid parameters in type 2 diabetes. *Journal of the Pakistan Medical Association*, *66*(10), 1262–1266.
- Barrett, E. J., & Liu, Z. (2013). The endothelial cell: An “early responder” in the development of insulin resistance. *Reviews in Endocrine and Metabolic Disorders*, *14*(1), 21–27. <https://doi.org/10.1007/s11154-012-9232-6>
- Chapman, M. J., & Sposito, A. C. (2008). Hypertension and dyslipidaemia in obesity and insulin resistance: Pathophysiology, impact on atherosclerotic disease and pharmacotherapy. *Pharmacology and Therapeutics*. <https://doi.org/10.1016/j.pharmthera.2007.10.004>
- Chia, C. W., Egan, J. M., & Ferrucci, L. (2018). Age-related changes in glucose metabolism, hyperglycemia, and cardiovascular risk. *Circulation Research*. <https://doi.org/10.1161/CIRCRESAHA.118.312806>
- Chobanian, A. V., Bakris, G. L., Black, H. R., Cushman, W. C., Green, L. A., Izzo, J. L., ... Roccella, E. J. (2003). Seventh report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure. *Hypertension*. <https://doi.org/10.1161/01.HYP.0000107251.49515.c2>
- De Boer, I. H., Bangalore, S., Benetos, A., Davis, A. M., Michos, E. D., Muntner, P., ... Bakris, G. (2017). Diabetes and hypertension: A position statement by the American diabetes association. *Diabetes Care*. <https://doi.org/10.2337/dci17->

- De Ritter, R., De Jong, M., Vos, R. C., Van Der Kallen, C. J. H., Sep, S. J. S., Woodward, M., ... Peters, S. A. E. (2020). Sex differences in the risk of vascular disease associated with diabetes. *Biology of Sex Differences*, *11*(1), 1–11. <https://doi.org/10.1186/s13293-019-0277-z>
- Dinh, Q. N., Drummond, G. R., Sobey, C. G., & Chrissobolis, S. (2014). Roles of inflammation, oxidative stress, and vascular dysfunction in hypertension. *BioMed Research International*, *2014*. <https://doi.org/10.1155/2014/406960>
- Dong, Y., Wu, Y., Wu, M., Wang, S., Zhang, J., Xie, Z., ... Zou, M. H. (2009). Activation of protease calpain by oxidized and glycated LDL increases the degradation of endothelial nitric oxide synthase. *Journal of Cellular and Molecular Medicine*, *13*(9 A), 2899–2910. <https://doi.org/10.1111/j.1582-4934.2008.00416.x>
- Du, T., Fernandez, C., Barshop, R., Guo, Y., Krousel-Wood, M., Chen, W., ... Bazzano, L. (2019). Sex differences in cardiovascular risk profile from childhood to midlife between individuals who did and did not develop diabetes at follow-up: The Bogalusa Heart Study. *Diabetes Care*, *42*(4), 635–643. <https://doi.org/10.2337/dc18-2029>
- Engin, A. B., & Engin, A. (2017). *Endothelial Dysfunction in Obesity* (Vol. 960). <https://doi.org/10.1007/978-3-319-48382-5>
- Fardoun, M., Dehaini, H., Shaito, A., Mesmar, J., El-Yazbi, A., Badran, A., ... Eid, A. H. (2020). *The hypertensive potential of estrogen: An untold story*. *Vascular Pharmacology* (Vol. 124). Elsevier Inc. <https://doi.org/10.1016/j.vph.2019.106600>
- Faulkner, J. L., & Belin De Chantemèle, E. J. (2018). Sex Differences in Mechanisms of Hypertension Associated with Obesity. *Hypertension*. <https://doi.org/10.1161/HYPERTENSIONAHA.117.09980>
- Faulkner, J. L., & Belin De Chantemèle, E. J. (2019). Sex hormones, aging and cardiometabolic syndrome. *Biology of Sex Differences*. <https://doi.org/10.1186/s13293-019-0246-6>
- Feingold, K. R., & Grunfeld, C. (2018). *Introduction to Lipids and Lipoproteins. Endotext*.
- Filippatos, T., Tsimihodimos, V., Pappa, E., & Elisaf, M. (2017). Pathophysiology of Diabetic Dyslipidaemia. *Current Vascular Pharmacology*, *15*(6), 566–575. <https://doi.org/10.2174/1570161115666170201105425>
- Gabriel Khan, M. (2011). *Encyclopedia of Heart Diseases. Encyclopedia of Heart Diseases 2nd Edition*. <https://doi.org/10.1016/B978-0-12-406061-6.X5000-0>
- Gardner, D. G., & Shobac, D. (2018). *Greenspan's Basic & Clinical Endocrinology*.

Greenspan's Basic & Clinical Endocrinology 10th Edition.

- Gliozzi, M., Scicchitano, M., Bosco, F., Musolino, V., Carresi, C., Scarano, F., ... Mollace, V. (2019). Modulation of nitric oxide synthases by oxidized LDLs: Role in vascular inflammation and atherosclerosis development. *International Journal of Molecular Sciences*. <https://doi.org/10.3390/ijms20133294>
- Glovaci, D., Fan, W., & Wong, N. D. (2019). Epidemiology of Diabetes Mellitus and Cardiovascular Disease. *Current Cardiology Reports*, 21(4), 1–8. <https://doi.org/10.1007/s11886-019-1107-y>
- Goldstein, J. L., & Brown, M. S. (2015). A century of cholesterol and coronaries: From plaques to genes to statins. *Cell*. <https://doi.org/10.1016/j.cell.2015.01.036>
- Halim, M., & Halim, A. (2019). The effects of inflammation, aging and oxidative stress on the pathogenesis of diabetes mellitus (type 2 diabetes). *Diabetes and Metabolic Syndrome: Clinical Research and Reviews*, 13(2), 1165–1172. <https://doi.org/10.1016/j.dsx.2019.01.040>
- Hirano, T. (2018). Pathophysiology of diabetic dyslipidemia. *Journal of Atherosclerosis and Thrombosis*. <https://doi.org/10.5551/jat.RV17023>
- Huebschmann, A. G., Huxley, R. R., Kohrt, W. M., Zeitler, P., Regensteiner, J. G., & Reusch, J. E. B. (2019). Sex differences in the burden of type 2 diabetes and cardiovascular risk across the life course. *Diabetologia*. <https://doi.org/10.1007/s00125-019-4939-5>
- International Diabetes Federation. (2017). *Eighth edition 2017. IDF Diabetes Atlas, 8th edition*. [https://doi.org/http://dx.doi.org/10.1016/S0140-6736\(16\)31679-8](https://doi.org/http://dx.doi.org/10.1016/S0140-6736(16)31679-8).
- International Diabetes Federation. (2019). *IDF Diabetes Atlas - 2019. International Diabetes Federation*.
- Isezuo, S. A., Badung, S. L. H., & Omotoso, A. B. O. (2003). Comparative analysis of lipid profiles among patients with type 2 diabetes mellitus, hypertension and concurrent type 2 diabetes, and hypertension: A view of metabolic syndrome. *Journal of the National Medical Association*.
- Kemenkes RI. (2018). Hasil Utama Riset Kesehatan Dasar Tahun 2018. *Kementrian Kesehatan Republik Indonesia*. <https://doi.org/10.1016/j.dsx.2019.01.040> 1 Desember 2013
- Kim, C. H., Kim, H. K., Kim, E. H., Bae, S. J., & Park, J. Y. (2014). Association between changes in body composition and risk of developing type 2 diabetes in Koreans. *Diabetic Medicine*, 31(11), 1393–1398. <https://doi.org/10.1111/dme.12527>
- Laakso, M., & Kuusisto, J. (2014). Insulin resistance and hyperglycaemia in cardiovascular disease development. *Nature Reviews Endocrinology*, 10(5), 293–302. <https://doi.org/10.1038/nrendo.2014.29>

- Lara-Guzmán, O. J., Gil-Izquierdo, Á., Medina, S., Osorio, E., Álvarez-Quintero, R., Zuluaga, N., ... Muñoz-Durango, K. (2018). Oxidized LDL triggers changes in oxidative stress and inflammatory biomarkers in human macrophages. *Redox Biology*. <https://doi.org/10.1016/j.redox.2017.11.017>
- Lastra, G., Syed, S., Kurukulasuriya, L. R., Manrique, C., & Sowers, J. R. (2014). Type 2 diabetes mellitus and hypertension: An update. *Endocrinology and Metabolism Clinics of North America*. <https://doi.org/10.1016/j.ecl.2013.09.005>
- Libianto, R., Batu, D., MacIsaac, R. J., Cooper, M. E., & Ekinci, E. I. (2018). Pathophysiological Links Between Diabetes and Blood Pressure. *Canadian Journal of Cardiology*, *34*(5), 585–594. <https://doi.org/10.1016/j.cjca.2018.01.010>
- Lloyd-Jones, D. M. (2018). General Population and Global Cardiovascular Risk Prediction. In *Hypertension: A Companion to Braunwald's Heart Disease* (pp. 1–14). Elsevier. <https://doi.org/10.1016/B978-0-323-42973-3.00001-9>
- Logue, J., Walker, J. J., Colhoun, H. M., Leese, G. P., Lindsay, R. S., McKnight, J. A., ... Sattar, N. (2011). Do men develop type 2 diabetes at lower body mass indices than women? *Diabetologia*, *54*(12), 3003–3006. <https://doi.org/10.1007/s00125-011-2313-3>
- Longo, D. L. (2015). *Harrison Principle of Internal Medicine. Harrison Principle of Internal Medicine*. <https://doi.org/10.1111/j.1745-3933.2011.01093.x>
- Longo, M., Bellastella, G., Maiorino, M. I., Meier, J. J., Esposito, K., & Giugliano, D. (2019). Diabetes and aging: From treatment goals to pharmacologic therapy. *Frontiers in Endocrinology*, *10*(FEB). <https://doi.org/10.3389/fendo.2019.00045>
- Manrique-Acevedo, C., Chinnakotla, B., Padilla, J., Martinez-Lemus, L. A., & Gozal, D. (2020). Obesity and cardiovascular disease in women. *International Journal of Obesity*. <https://doi.org/10.1038/s41366-020-0548-0>
- Mauvais-Jarvis, F. (2017). Menopause, estrogens, and glucose homeostasis in women. *Advances in Experimental Medicine and Biology*, *1043*, 217–225. https://doi.org/10.1007/978-3-319-70178-3_11
- NCEP. (2001). Third Report of the National Cholesterol Education Program (NCEP) Expert Panel on on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults. *01-3670*. <https://doi.org/10.1001/jama.285.19.2486>
- Nevelsteen, I., Van Den Bergh, A., Van Der Mieren, G., Vanderper, A., Mubagwa, K., Bult, H., & Herijgers, P. (2013). NO-dependent endothelial dysfunction in type II diabetes is aggravated by dyslipidemia and hypertension, but can be restored by angiotensin-converting enzyme inhibition and weight loss. *Journal of Vascular Research*, *50*(6), 486–497. <https://doi.org/10.1159/000355221>
- Newson, L. (2018). Menopause and cardiovascular disease. *Post Reproductive Health*,

24(1), 44–49. <https://doi.org/10.1177/2053369117749675>

- Noviyanti, F., Decroli, E., & Sastri, S. (2015). Perbedaan Kadar LDL-kolesterol pada Pasien Diabetes Melitus Tipe 2 dengan dan tanpa Hipertensi di RS Dr. M. Djamil Padang Tahun 2011. *Jurnal Kesehatan Andalas*, 4(2), 545–550. <https://doi.org/10.25077/jka.v4i2.297>
- Ohishi, M. (2018). Hypertension with diabetes mellitus: Physiology and pathology review-article. *Hypertension Research*, 41(6), 389–393. <https://doi.org/10.1038/s41440-018-0034-4>
- Oishi, J. C., Castro, C. A., Silva, K. A., Fabricio, V., Cárnio, E. C., Phillips, S. A., ... Rodrigues, G. J. (2018). Endothelial dysfunction and inflammation precedes elevations in blood pressure induced by a high-fat diet. *Arquivos Brasileiros de Cardiologia*, 110(6), 558–567. <https://doi.org/10.5935/abc.20180086>
- Ormazabal, V., Nair, S., Elfeky, O., Aguayo, C., Salomon, C., & Zuñiga, F. A. (2018). Association between insulin resistance and the development of cardiovascular disease. *Cardiovascular Diabetology*, 17(1), 1–14. <https://doi.org/10.1186/s12933-018-0762-4>
- PA, J., Oparil, S., BL, C., & Al, E. (2014). 2014 evidence-based guideline for the management of high blood pressure in adults: Report from the panel members appointed to the eighth joint national committee (jnc 8). *JAMA*.
- Paul, S., Thomas, G., Majeed, A., Khunti, K., & Klein, K. (2012). Women develop type 2 diabetes at a higher body mass index than men. *Diabetologia*, 55(5), 1556–1557. <https://doi.org/10.1007/s00125-012-2496-2>
- Peters, S. A. E., Huxley, R. R., Sattar, N., & Woodward, M. (2015). Sex Differences in the Excess Risk of Cardiovascular Diseases Associated with Type 2 Diabetes: Potential Explanations and Clinical Implications. *Current Cardiovascular Risk Reports*, 9(7), 1–7. <https://doi.org/10.1007/s12170-015-0462-5>
- Qin, L., Zhu, X., Liu, X., Zeng, M., Tao, R., Zhuang, Y., ... Ye, H. (2018). Evaluation of lipid profile and its relationship with blood pressure in patients with Cushing's disease. *Endocrine Connections*, 7(5), 637–644. <https://doi.org/10.1530/EC-18-0010>
- Rehman, K., & Akash, M. S. H. (2016). Mechanisms of inflammatory responses and development of insulin resistance: How are they interlinked? *Journal of Biomedical Science*, 23(1), 1–18. <https://doi.org/10.1186/s12929-016-0303-y>
- Rehman, K., & Akash, M. S. H. (2017). Mechanism of Generation of Oxidative Stress and Pathophysiology of Type 2 Diabetes Mellitus: How Are They Interlinked? *Journal of Cellular Biochemistry*, 118(11), 3577–3585. <https://doi.org/10.1002/jcb.26097>
- Rettberg, J. R., Yao, J., & Brinton, R. D. (2014). Estrogen: A master regulator of

- bioenergetic systems in the brain and body. *Frontiers in Neuroendocrinology*.
<https://doi.org/10.1016/j.yfrne.2013.08.001>
- Rudyanto, W. (2017). Hubungan Komplikasi Kronis Diabetes Melitus terhadap Pola Terapi Farmakologis Pasien Diabetes Melitus Tipe 2 di Poli Endokrin Rumah Sakit Umum Pusat Dr. Wahidin Sudirohusodo Periode Januari-Juni 2017.
- Salman, M., Dasgupta, S., D'Souza, C. J. M., Xaviour, D., Raviprasad, B. V., Rao, J., & Lakshmi, G. L. (2013). Impact of Hypertension on Type 2 Diabetes in Mysore Population of South India. *International Journal of Clinical Medicine*, *04*(12), 561–570. <https://doi.org/10.4236/ijcm.2013.412097>
- Santilli, F., D'Ardes, D., & Davì, G. (2015). Oxidative stress in chronic vascular disease: From prediction to prevention. *Vascular Pharmacology*, *74*, 23–37. <https://doi.org/10.1016/j.vph.2015.09.003>
- Sena, C. M., Pereira, A. M., & Seïça, R. (2013). Endothelial dysfunction - A major mediator of diabetic vascular disease. *Biochimica et Biophysica Acta - Molecular Basis of Disease*, *1832*(12), 2216–2231. <https://doi.org/10.1016/j.bbadis.2013.08.006>
- Sesti, G., Antonelli Incalzi, R., Bonora, E., Consoli, A., Giaccari, A., Maggi, S., ... Ferrara, N. (2018). Management of diabetes in older adults. *Nutrition, Metabolism and Cardiovascular Diseases*, *28*(3), 206–218. <https://doi.org/10.1016/j.numecd.2017.11.007>
- Siregar, J. (2019). Perbandingan profil lipid dengan hipertensi pada diabetes mellitus tipe 2 dengan atau tanpa hipertensi di RS H. Adam Malik, Medan, Indonesia. *Intisari Sains Medis*. <https://doi.org/10.15562/ism.v10i2.376>
- Srivastava, P., Badhwar, S., Chandran, D. S., Jaryal, A. K., Jyotsna, V. P., & Deepak, K. K. (2019). Imbalance between Angiotensin II - Angiotensin (1-7)system is associated with vascular endothelial dysfunction and inflammation in type 2 diabetes with newly diagnosed hypertension. *Diabetes and Metabolic Syndrome: Clinical Research and Reviews*, *13*(3), 2061–2068. <https://doi.org/10.1016/j.dsx.2019.04.042>
- Stanhewicz, A. E., Wenner, M. M., & Stachenfeld, N. S. (2018). Sex differences in endothelial function important to vascular health and overall cardiovascular disease risk across the lifespan. *American Journal of Physiology - Heart and Circulatory Physiology*. <https://doi.org/10.1152/ajpheart.00396.2018>
- Strehlow, K., Wassmann, S., Bohm, M., & Nickenig, G. (2000). Angiotensin AT1 receptor over-expression in hypercholesterolaemia. *Annals of Medicine*, *32*(6), 386–389. <https://doi.org/10.3109/07853890008995944>
- Tadic, M., Cuspidi, C., Grassi, G., & Ivanovic, B. (2019). Gender-specific therapeutic approach in arterial hypertension – Challenges ahead. *Pharmacological Research*, *141*, 181–188. <https://doi.org/10.1016/j.phrs.2018.12.021>

- Taskinen, M. R., & Borén, J. (2015). *New insights into the pathophysiology of dyslipidemia in type 2 diabetes. Atherosclerosis* (Vol. 239). Elsevier Ltd. <https://doi.org/10.1016/j.atherosclerosis.2015.01.039>
- Tousoulis, D., Kampoli, A.-M., & Stefanadis, C. (2011). Diabetes Mellitus and Vascular Endothelial Dysfunction: Current Perspectives. *Current Vascular Pharmacology*, *10*(1), 19–32. <https://doi.org/10.2174/157016112798829797>
- Vergès, B. (2015). Pathophysiology of diabetic dyslipidaemia: where are we? *Diabetologia*, *58*(5), 886–899. <https://doi.org/10.1007/s00125-015-3525-8>
- WHO. (2016). Global Report on Diabetes. *Isbn*. [https://doi.org/ISBN 978 92 4 156525 7](https://doi.org/ISBN%20978%2092%204%20156525%207)
- WHO. (2017). NCD mortality and morbidity.
- Wijanarko, S. I., Herawati, S., Agung, A., & Subawa, N. (2018). Perbedaan kadar kolesterol low density lipoprotein (LDL) pada diabetes mellitus tipe 2 dengan hipertensi serta tanpa hipertensi di RSUP Sanglah Denpasar , Bali. *Jurnal Medika Udayana*, *7*(3), 117–120.
- Wilsgaard, T., Schirmer, H., & Arnesen, E. (2000). Impact of body weight on blood pressure with a focus sex differences: The Tromso study, 1986-1995. *Archives of Internal Medicine*, *160*(18), 2847–2853. <https://doi.org/10.1001/archinte.160.18.2847>
- Wjiaya, A. A. (2010). Perbedaan Profil Lipid Antara Pasien Diabetes Melitus Tipe 2 dengan Hipertensi dan Tanpa Hipertensi, 1–10.
- Yuan, T., Yang, T., Chen, H., Fu, D., Hu, Y., Wang, J., ... Xie, X. (2019). New insights into oxidative stress and inflammation during diabetes mellitus-accelerated atherosclerosis. *Redox Biology*. <https://doi.org/10.1016/j.redox.2018.09.025>
- Zafar, U., Khaliq, S., Ahmad, H. U., Manzoor, S., & Lone, K. P. (2018). Metabolic syndrome: an update on diagnostic criteria, pathogenesis, and genetic links. *Hormones*, *17*(3), 299–313. <https://doi.org/10.1007/s42000-018-0051-3>
- Zhou, M. S., Schulman, I. H., & Zeng, Q. (2012). Link between the renin-angiotensin system and insulin resistance: Implications for cardiovascular disease. *Vascular Medicine (United Kingdom)*, *17*(5), 330–341. <https://doi.org/10.1177/1358863X12450094>

Lampiran 1. Surat Izin Permohonan Penelitian



KEMENTERIAN RISET, TEKNOLOGI DAN PENDIDIKAN TINGGI
UNIVERSITAS HASANUDDIN
FAKULTAS KEDOKTERAN
PROGRAM STUDI SARJANA KEDOKTERAN

Jl. Perintis Kemerdekaan Km. 10 Tamalatea, Makassar 90245, Telp. (0411) 587436, Fax. (0411) 586297

Nomor : 19635/UN4.6.8/PT.01.04/2019
Lamp : ---
Hal : Permohonan Izin Penelitian

Makassar, 30 September 2019

Yth. :
Direktur RSPTN Universitas Hasanuddin
Makassar

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

N a m a : Aisyah Nurul Salsabila Azuz
N i m : C011171508

bermaksud melakukan penelitian di RSPTN Universitas Hasanuddin dengan judul penelitian **"Perbedaan Kadar LDL Kolesterol Pada Pasien Diabetes Melitus Tipe 2 Dengan Dan Tanpa Hipertensi Di RSPTN Universitas Hasanuddin Periode Januari-Juni 2018"**.

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 196805301997032001

Tembusan Yth :
1. Arsip

Lampiran 2. Surat Rekomendasi Persetujuan Etik



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, TLP 081241850858, 0411 5780103, Fax : 0411 581431

REKOMENDASI PERSETUJUAN ETIK

Nomor : 1230/UN4.6.4.5.31/ PP36/ 2019

Tanggal: 31 Desember 2019



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

No Protokol	UH19121151		No Sponsor	
Peneliti Utama	Aisyah Nurul Salsabila Azuz		Sponsor	
Judul Peneliti	Perbedaan Kadar LDL Kolesterol Pada Pasien Diabetes Mellitus Tipe 2 Dengan dan Tanpa Hipertensi di RSPTN Universitas Hasanuddin Periode Januari - Juni 2018			
No Versi Protokol	1	Tanggal Versi	31 Desember 2019	
No Versi PSP		Tanggal Versi		
Tempat Penelitian	RS Universitas Hasanuddin Makassar			
Jenis Review	<input checked="" type="checkbox"/> Exempted		Masa Berlaku	Frekuensi review lanjutan
	<input type="checkbox"/> Expedited		31 Desember 2019	
	<input type="checkbox"/> Fullboard Tanggal		sampai	
			31 Desember 2020	
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 Laporan 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 3. Surat Keterangan Izin Penelitian

 RUMAH SAKIT UNIVERSITAS HASANUDDIN	SURAT IZIN PENELITIAN	
	Nomor: 467/UN4.26.1.2/PT.01.04/2020	Tanggal 17 Januari 2020
FORMULIR 2 BIDANG PENELITIAN DAN INOVASI	Kepada Yth Kepala Instalasi Rekam Medis	
<p>Dengan hormat, Dengan ini menerangkan bahwa peneliti/ mahasiswa berikut ini:</p> <p>Nama : Aisyah Nurul Salsabila Azuz NIM / NIP : C011171508 Institusi : Pendidikan Dokter Umum, Fakultas Kedokteran, Universitas Hasanuddin Kode penelitian : 200117_1</p> <p>Akan melakukan pengambilan data/ analisa bahan hayati:</p> <p>Terhitung : 17 Januari 2020 s/d 17 April 2020 Jumlah Subjek/Sample : 100 Jenis Data : Rekam medik pasien diabetes melitus tipe 2</p> <p>Untuk penelitian dengan judul: "Perbedaan Kadar LDL Kolesterol pada Pasien Diabetes Melitus Tipe 2 dengan dan Tanpa Hipertensi di RSPTN Universitas Hasanuddin Periode Januari-Juni 2018"</p> <p>Harap dilakukan pembimbingan dan pendampingan seperlunya.</p> <p style="text-align: center;">Kepala Bidang Penelitian dan Inovasi</p> <div style="text-align: center;">  dr. Muhr. Firdaus Kasim, M.Sc NIP.198412012018073001 </div> <p><i>Catatan: Lembaran ini diarsipkan oleh Bidang Penelitian dan Inovasi</i></p>		

Lampiran 4. Data Rekam Medis

No.	Nomor RM	Jenis Kelamin	Umur	Diagnosis	Tekanan Darah Sistolik	Tekanan Darah Diastolik	LDL
1	12193	LAKI-LAKI	66	DMT2+HT	140	75	78
2	21649	LAKI-LAKI	68	DMT2+HT	150	80	119
3	22780	LAKI-LAKI	45	DMT2+HT	150	80	96
4	35227	LAKI-LAKI	64	DMT2+HT	140	90	142
5	90521	LAKI-LAKI	53	DMT2+HT	180	80	158
6	92076	LAKI-LAKI	30	DMT2+HT	140	90	169
7	92404	LAKI-LAKI	66	DMT2+HT	150	80	136
8	92771	LAKI-LAKI	76	DMT2+HT	170	80	184
9	93563	LAKI-LAKI	55	DMT2+HT	140	100	188
10	98491	LAKI-LAKI	53	DMT2+HT	140	90	124
11	99338	LAKI-LAKI	61	DMT2+HT	150	90	98
12	99953	LAKI-LAKI	59	DMT2+HT	140	100	125
13	89008	LAKI-LAKI	53	DMT2+HT	140	90	116
14	93996	LAKI-LAKI	65	DMT2+HT	140	80	162
15	95813	LAKI-LAKI	51	DMT2+HT	140	90	137
16	82019	LAKI-LAKI	71	DMT2+HT	140	90	119
17	74110	LAKI-LAKI	78	DMT2+HT	150	90	156
18	25708	LAKI-LAKI	59	DMT2+HT	150	80	125
19	26038	LAKI-LAKI	60	DMT2+HT	140	90	96
20	90639	LAKI-LAKI	68	DMT2+HT	150	90	145
21	90965	LAKI-LAKI	49	DMT2+HT	140	90	95
22	91897	LAKI-LAKI	70	DMT2+HT	140	80	168
23	92043	LAKI-LAKI	66	DMT2+HT	160	100	148
24	44696	LAKI-LAKI	61	DMT2+HT	140	80	95
25	41556	LAKI-LAKI	51	DMT2+HT	140	90	98
26	3107	PEREMPUAN	61	DMT2+HT	160	90	162
27	3202	PEREMPUAN	58	DMT2+HT	140	80	95
28	5772	PEREMPUAN	59	DMT2+HT	150	80	203
29	6127	PEREMPUAN	33	DMT2+HT	160	90	161
30	91885	PEREMPUAN	48	DMT2+HT	140	90	138
31	68710	PEREMPUAN	54	DMT2+HT	160	90	196
32	71810	PEREMPUAN	54	DMT2+HT	140	80	127
33	92550	PEREMPUAN	59	DMT2+HT	160	90	206
34	92556	PEREMPUAN	55	DMT2+HT	150	80	139

No.	Nomor RM	Jenis Kelamin	Umur	Diagnosis	Tekanan Darah Sistolik	Tekanan Darah Diastolik	LDL
35	93037	PEREMPUAN	55	DMT2+HT	140	80	109
36	93052	PEREMPUAN	39	DMT2+HT	160	100	149
37	93510	PEREMPUAN	60	DMT2+HT	170	80	140
38	94470	PEREMPUAN	59	DMT2+HT	160	100	215
39	94859	PEREMPUAN	55	DMT2+HT	150	90	136
40	95116	PEREMPUAN	60	DMT2+HT	140	90	132
41	95269	PEREMPUAN	42	DMT2+HT	140	80	127
42	95782	PEREMPUAN	47	DMT2+HT	190	110	158
43	96231	PEREMPUAN	71	DMT2+HT	180	70	204
44	96249	PEREMPUAN	62	DMT2+HT	140	90	87
45	98685	PEREMPUAN	54	DMT2+HT	140	80	153
46	99559	PEREMPUAN	46	DMT2+HT	140	80	194
47	100333	PEREMPUAN	51	DMT2+HT	140	80	125
48	100988	PEREMPUAN	47	DMT2+HT	180	100	118
49	91447	PEREMPUAN	52	DMT2+HT	150	90	124
50	91302	PEREMPUAN	53	DMT2+HT	170	100	98
51	89819	PEREMPUAN	63	DMT2+HT	140	80	132
52	89773	PEREMPUAN	80	DMT2+HT	170	90	120
53	89661	PEREMPUAN	65	DMT2+HT	150	90	131
54	91923	PEREMPUAN	46	DMT2+HT	180	110	140
55	6325	PEREMPUAN	57	DMT2+HT	140	90	103
56	8959	PEREMPUAN	60	DMT2+HT	160	90	134
57	92606	PEREMPUAN	67	DMT2+HT	150	90	130
58	95782	PEREMPUAN	58	DMT2+HT	140	90	155
59	66010	PEREMPUAN	52	DMT2+HT	140	90	117
60	67158	PEREMPUAN	50	DMT2+HT	150	80	119
61	69530	PEREMPUAN	68	DMT2+HT	140	90	177
62	77413	PEREMPUAN	49	DMT2+HT	150	90	131
63	91481	PEREMPUAN	66	DMT2+HT	140	90	116
64	73145	PEREMPUAN	56	DMT2+HT	150	90	129
65	48755	PEREMPUAN	48	DMT2+HT	170	100	157
66	53260	PEREMPUAN	53	DMT2+HT	150	80	172
67	92961	PEREMPUAN	65	DMT2+HT	190	100	196
68	9964	LAKI-LAKI	65	DMT2	130	70	116
69	12797	LAKI-LAKI	52	DMT2	130	70	182

No.	Nomor RM	Jenis Kelamin	Umur	Diagnosis	Tekanan Darah Sistolik	Tekanan Darah Diastolik	LDL
70	15744	LAKI-LAKI	67	DMT2	120	80	142
71	18252	LAKI-LAKI	60	DMT2	130	80	116
72	35701	LAKI-LAKI	62	DMT2	130	80	114
73	36492	LAKI-LAKI	65	DMT2	100	80	134
74	90208	LAKI-LAKI	65	DMT2	130	70	66
75	90740	LAKI-LAKI	55	DMT2	80	60	155
76	92445	LAKI-LAKI	59	DMT2	120	80	147
77	94510	LAKI-LAKI	67	DMT2	110	80	98
78	95063	LAKI-LAKI	45	DMT2	120	80	135
79	95133	LAKI-LAKI	69	DMT2	120	80	143
80	95893	LAKI-LAKI	66	DMT2	120	70	156
81	95959	LAKI-LAKI	45	DMT2	110	70	194
82	98873	LAKI-LAKI	42	DMT2	100	90	103
83	99085	LAKI-LAKI	59	DMT2	110	70	75
84	100497	LAKI-LAKI	51	DMT2	110	70	124
85	100805	LAKI-LAKI	40	DMT2	120	70	123
86	89227	LAKI-LAKI	53	DMT2	110	80	93
87	88767	LAKI-LAKI	59	DMT2	130	80	174
88	93873	LAKI-LAKI	60	DMT2	120	80	97
89	93136	LAKI-LAKI	47	DMT2	100	70	130
90	87268	LAKI-LAKI	63	DMT2	120	70	88
91	7835	LAKI-LAKI	58	DMT2	130	80	62
92	91800	LAKI-LAKI	54	DMT2	110	70	89
93	92883	LAKI-LAKI	53	DMT2	120	70	94
94	25121	LAKI-LAKI	56	DMT2	120	80	113
95	72033	LAKI-LAKI	49	DMT2	130	80	97
96	76159	LAKI-LAKI	53	DMT2	120	80	90
97	87850	LAKI-LAKI	56	DMT2	130	80	88
98	91708	LAKI-LAKI	53	DMT2	120	80	157
99	92448	LAKI-LAKI	57	DMT2	110	80	95
100	77953	LAKI-LAKI	71	DMT2	130	80	138
101	12971	PEREMPUAN	59	DMT2	110	70	170
102	34886	PEREMPUAN	70	DMT2	120	70	110
103	88955	PEREMPUAN	41	DMT2	100	80	138
104	92265	PEREMPUAN	42	DMT2	120	80	99

No.	Nomor RM	Jenis Kelamin	Umur	Diagnosis	Tekanan Darah Sistolik	Tekanan Darah Diastolik	LDL
105	92617	PEREMPUAN	47	DMT2	120	70	134
106	92771	PEREMPUAN	47	DMT2	130	90	172
107	93510	PEREMPUAN	55	DMT2	100	80	109
108	94082	PEREMPUAN	48	DMT2	120	80	113
109	94691	PEREMPUAN	60	DMT2	130	80	104
110	94737	PEREMPUAN	54	DMT2	120	80	212
111	95425	PEREMPUAN	54	DMT2	130	80	141
112	95614	PEREMPUAN	52	DMT2	120	80	121
113	98329	PEREMPUAN	38	DMT2	100	70	120
114	99270	PEREMPUAN	39	DMT2	110	70	120
115	99741	PEREMPUAN	42	DMT2	120	80	186
116	100050	PEREMPUAN	55	DMT2	120	70	188
117	100974	PEREMPUAN	61	DMT2	120	80	210
118	95306	PEREMPUAN	60	DMT2	120	70	96
119	6965	PEREMPUAN	72	DMT2	120	70	140
120	8392	PEREMPUAN	72	DMT2	110	70	97
121	9605	PEREMPUAN	71	DMT2	110	70	110
122	93136	PEREMPUAN	53	DMT2	100	70	96
123	90881	PEREMPUAN	48	DMT2	120	80	160
124	91663	PEREMPUAN	45	DMT2	120	70	141
125	93783	PEREMPUAN	56	DMT2	120	80	82
126	14040	PEREMPUAN	54	DMT2	120	70	126
127	47406	PEREMPUAN	37	DMT2	110	70	166
128	76484	PEREMPUAN	46	DMT2	120	80	128
129	78820	PEREMPUAN	56	DMT2	130	80	180
130	84248	PEREMPUAN	52	DMT2	120	70	97
131	77371	PEREMPUAN	65	DMT2	110	70	130
132	77506	PEREMPUAN	58	DMT2	120	80	105
133	75705	PEREMPUAN	57	DMT2	110	80	96
134	68188	PEREMPUAN	59	DMT2	120	80	149

Lampiran 5. Hasil Uji Statistk

Rerata Tekanan Darah Kelompok DMT 2 dengan Hipertensi

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
VAR00006	67	140,00	190,00	151,0448	13,83171
VAR00007	67	80,00	110,00	88,1343	8,06394
Valid N (listwise)	67				

Rerata Tekanan Darah Kelompok Pasien DMT 2 Tanpa Hipertensi

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
VAR00006	67	80,00	130,00	117,3134	10,08781
VAR00007	67	60,00	90,00	75,8209	5,81254
Valid N (listwise)	67				

Perbedaan Kadar LDL Kolesterol Kelompok Pasien DMT2 dengan dan Tanpa Hipertensi

Group Statistics

	StatusHT	N	Mean	Std. Deviation	Std. Error Mean
LDL	HT	67	139,2836	32,29964	3,94603
	NT	67	126,4776	34,49829	4,21464

		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
LDL	Equal variances assumed	,490	,485	2,218	132

Equal variances not assumed			2,218	131,432
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t-test for Equality of Means

		Sig. (2-tailed)	Mean Difference	Std. Error Difference
LDL	Equal variances assumed	,028	12,80597	5,77359
	Equal variances not assumed	,028	12,80597	5,77359

Tests of Normality

StatusHT	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
LDL HT	,103	67	,074	,965	67	,056
LDL NT	,086	67	,200*	,964	67	,050

Lampiran 6. Biodata Penulis



Data Pribadi:

Nama Lengkap : Aisyah Nurul Salsabila Azuz
Nama Panggilan : Nurul
Tempat/Tanggal Lahir : Makassar/16 Agustus 2001
Pekerjaan : Mahasiswi
Agama : Islam
Alamat saat ini : Permata Sudiang Raya
No. Telp : 082189526789
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Riwayat Pendidikan

Periode	Sekolah/Institusi/Universitas	Jurusan
2006 – 2012	SD Negeri Baddoka Makassar	-
2012 – 2014	SMP Negeri 12 Makassar	-
2014 – 2016	SMA Negeri 17 Makassar	IPA
2016 – 2017	Fakultas Kedokteran Universitas Hasanuddin	Psikologi
2017 – sekarang	Fakultas Kedokteran Universitas Hasanuddin	Pendidikan Dokter Umum

Riwayat Organisasi

Periode	Organisasi	Jabatan
2018 – 2019	AMSA – Universitas Hasanuddin	Anggota Divisi <i>Publication & Promotion</i>

2019 – 2020		Anggota <i>Advisory Board</i>
2019 – 2020	MYRC Fakultas Kedokteran Universitas Hasanuddin	Anggota Badan Pengurus
2020	BEM KEMA Fakultas Kedokteran Universitas Hasanuddin	Anggota Kementerian Administrasi & Pengembangan