

DAFTAR PUSTAKA

1. Abera, A. and Gessesse, G. W. (2023) 'Diagnostic performance of optical coherence tomography macular ganglion cell inner plexiform layer and retinal nerve fiber layer thickness in glaucoma suspect and early glaucoma patients at St. Paul's hospital millennium medical college, Addis Ababa, Ethiopia', *PLoS ONE*, 18(1 January), pp. 1–11. doi: 10.1371/journal.pone.0263959.
2. Agarwal, R. et al. (2009) 'Current concepts in the pathophysiology of glaucoma', *Indian Journal of Ophthalmology*, 57(4), pp. 257–266. doi: 10.4103/0301-4738.53049.
3. Allison, K., Patel, D. and Alabi, O. (2020) 'Epidemiology of Glaucoma: The Past, Present, and Predictions for the Future', *Cureus*, 12(11). doi: 10.7759/cureus.11686.
4. Anctil, J. L. and Anderson, D. R. (1984) 'Early Foveal Involvement and Generalized Depression of the Visual Field in Glaucoma', *Archives of Ophthalmology*, 102(3), pp. 363–370. doi: 10.1001/archopht.1984.01040030281019.
5. Barua, N. et al. (2016) 'Comparison of diagnostic capability of macular ganglion cell complex and retinal nerve fiber layer among primary open angle glaucoma, ocular hypertension, and normal population using Fourier-domain optical coherence tomography and determining their functions', *Indian Journal of Ophthalmology*, 64(4), pp. 296–302. doi: 10.4103/0301-4738.182941.
6. Bellezza, A. J. et al. (2003) 'Deformation of the lamina cribrosa and anterior scleral canal wall in early experimental glaucoma', *Investigative Ophthalmology and Visual Science*, 44(2), pp. 623–637. doi: 10.1167/iovs.01-1282.
7. Belovay, G. W. and Goldberg, I. (2018) 'The thick and thin of the central corneal thickness in glaucoma', *Eye (Basingstoke)*. London: Eye (London), 32(5), pp. 915–923. doi: 10.1038/s41433-018-0033-3.
8. Bowd, C. et al. (2000) 'The retinal nerve fiber layer thickness in ocular hypertensive, normal, and glaucomatous eyes with optical coherence tomography', *Archives of Ophthalmology*, 118(1), pp. 22–26. doi: 10.1001/archopht.118.1.22.
9. Braaf, B. et al. (2019) *OCT-Based Velocimetry for Blood Flow Quantification, High Resolution Imaging in Microscopy and Ophthalmology*. doi: 10.1007/978-3-030-16638-0_7.
10. Bussel, I. I., Wollstein, G. and Schuman, J. S. (2014) 'OCT for glaucoma diagnosis, screening and detection of glaucoma progression', *British Journal of Ophthalmology*, 98(SUPPL. 2), pp. 15–19. doi: 10.1136/bjophthalmol-2013-304326.
11. Cantor, L. B. (2021) *Basic Clinical Science Course Section 12 Retina and Vitreous*. 2019th–2020th edn. San Francisco: American Academy of Ophthalmology.
12. Chauhan, B. C. et al. (2020) 'Differential Effects of Aging in the Macular Retinal Layers, Neuroretinal Rim, and Peripapillary Retinal Nerve Fiber Layer', *Ophthalmology*. American Academy of Ophthalmology, 127(2), pp. 177–185. doi: 10.1016/j.ophtha.2019.09.013.
13. Choi, J. A. et al. (2017) 'The Pattern of Retinal Nerve Fiber Layer and

- Macular Ganglion Cell-Inner Plexiform Layer Thickness Changes in Glaucoma', *Journal of Ophthalmology*, 2017. doi: 10.1155/2017/6078365.
14. Choi, M. G. et al. (2005) 'Comparison of glaucomatous parameters in normal, ocular hypertensive and glaucomatous eyes using optical coherence tomography 3000.', *Korean journal of ophthalmology: KJO*, 19(1), pp. 40–46. doi: 10.3341/kjo.2005.19.1.40.
 15. Choi, Y. J. et al. (2013) 'Glaucoma detection ability of ganglion cell-inner plexiform layer thickness by spectral-domain optical coherence tomography in high myopia', *Investigative Ophthalmology and Visual Science*, 54(3), pp. 2296–2304. doi: 10.1167/iovs.12-10530.
 16. Curcio, C. A. and Allen, K. A. (1990) 'Topography of ganglion cells in human retina', *Journal of Comparative Neurology*, 300(1), pp. 5–25. doi: 10.1002/cne.903000103.
 17. Dahlan MS (2009) *Analisis Penelitian Diagnostik.* ke-1, *Analisis Penelitian Diagnostik.* ke-1. jakarta: salemba medika.
 18. Demirkaya, N. et al. (2013) 'Effect of age on individual retinal layer thickness in normal eyes as measured with spectral-domain optical coherence tomography', *Investigative Ophthalmology and Visual Science*, 54(7), pp. 4934–4940. doi: 10.1167/iovs.13-11913.
 19. Effect, T. T. and L-glutamate, S. (1951) 'Layers', (1).
 20. Elbendary, A. et al. (2013) 'Retinal nerve fiber layer versus optic nerve head evaluation in the diagnosis of glaucoma and glaucoma suspect patients', *Journal of the Egyptian Ophthalmological Society*, 106(4), p. 253. doi: 10.4103/2090-0686.131608.
 21. Fallahi Motlagh, B. and Sadeghi, A. (2017) 'Correlation between Macular Thickness and Visual Field in Early Open Angle Glaucoma: A Cross-Sectional Study.', *Medical hypothesis, discovery & innovation ophthalmology journal*, 6(2), pp. 56–62. Available at: <http://www.ncbi.nlm.nih.gov/pubmed/29367936%0Ahttp://www.ncbi.nlm.nih.gov/article/PMC5776503>.
 22. Farkas, R. H. and Grosskreutz, C. L. (2001) 'Apoptosis, neuroprotection, and retinal ganglion cell death: An overview', *International Ophthalmology Clinics*, 41(1), pp. 111–130. doi: 10.1097/00004397-200101000-00011.
 23. Fechtner, R. D. and Weinreb, R. N. (1994) 'Mechanisms of optic nerve damage in primary open angle glaucoma', *Survey of Ophthalmology*, 39(1), pp. 23–42. doi: 10.1016/S0039-6257(05)80042-6.
 24. Feng, L. et al. (2013) 'Sustained ocular hypertension induces dendritic degeneration of mouse retinal ganglion cells that depends on cell type and location', *Investigative Ophthalmology and Visual Science*, 54(2), pp. 1106–1117. doi: 10.1167/iovs.12-10791.
 25. Fortune, B., Cull, G. A. and Burgoyne, C. F. (2008) 'Relative course of retinal nerve fiber layer birefringence and thickness and retinal function changes after optic nerve transection', *Investigative Ophthalmology and Visual Science*, 49(10), pp. 4444–4452. doi: 10.1167/iovs.08-2255.
 26. Gardiner, S. K. and Demirel, S. (2017) 'Detecting Change Using Standard Global Perimetric Indices in Glaucoma', *American Journal of Ophthalmology*. Elsevier Inc., 176, pp. 148–156. doi: 10.1016/j.ajo.2017.01.013.
 27. Gedde, S. J. et al. (2021) 'Primary Open-Angle Glaucoma Suspect Preferred Practice Pattern®', *Ophthalmology*, 128(1), pp. P151–P192. doi:

- 10.1016/j.ophtha.2020.10.023.
28. Ghanem, A. and Mokbel, T. (2010) 'Correlation of central corneal thickness and optic nerve head topography in patients with primary open-angle glaucoma', *Oman Journal of Ophthalmology*, 3(2), p. 75. doi: 10.4103/0974-620x.64231.
 29. Ghita, A. M. et al. (2023) 'Ganglion Cell Complex Analysis: Correlations with Retinal Nerve Fiber Layer on Optical Coherence Tomography', *Diagnostics*, 13(2), pp. 1–18. doi: 10.3390/diagnostics13020266.
 30. Girkin, C. A., Liebmann, J., et al. (2011) 'The effects of race, optic disc area, age, and disease severity on the diagnostic performance of spectral-domain optical coherence tomography', *Investigative Ophthalmology and Visual Science*, 52(9), pp. 6148–6153. doi: 10.1167/iovs.10-6698.
 31. Girkin, C. A., McGwin, G., et al. (2011) 'Variation in optic nerve and macular structure with age and race with spectral-domain optical coherence tomography', *Ophthalmology*. Elsevier Inc., 118(12), pp. 2403–2408. doi: 10.1016/j.ophtha.2011.06.013.
 32. Glovinsky, Y., Quigley, H. A. and Pease, M. E. (1993) 'Foveal ganglion cell loss is size dependent in experimental glaucoma', *Investigative Ophthalmology and Visual Science*, 34(2), pp. 395–400.
 33. Grillo, L. M. et al. (2016) 'The 24-2 visual field test misses central macular damage confirmed by the 10-2 visual field test and optical coherence tomography', *Translational Vision Science and Technology*, 5(2). doi: 10.1167/tvst.5.2.15.
 34. Grødum, K., Heijl, A. and Bengtsson, B. B. (2001) 'Refractive error and glaucoma', *Acta Ophthalmologica Scandinavica*, 79(6), pp. 560–566. doi: 10.1034/j.1600-0420.2001.790603.x.
 35. Grossmann, J. (2002) 'Molecular mechanisms of "detachment-induced apoptosis - Anoikis"', *Apoptosis*, 7(3), pp. 247–260. doi: 10.1023/A:1015312119693.
 36. Guedes, V. et al. (1999) 'Optical Coherence Tomography Measurement of Macular and Nerve Fiber', 6420(02), pp. 177–189.
 37. Guedes, V. et al. (2003) 'Optical Coherence Tomography Measurement of Macular and Nerve Fiber', 6420(02), pp. 177–189.
 38. Hasegawa, T. et al. (2015) 'Microcystic inner nuclear layer changes and retinal nerve fiber layer defects in eyes with glaucoma', *PLoS ONE*, 10(6), pp. 1–17. doi: 10.1371/journal.pone.0130175.
 39. Hollands, H. et al. (2013) 'Do findings on routine examination identify patients at risk for primary open-angle glaucoma? The rational clinical examination systematic review', *Jama*, 309(19), pp. 2035–2042. doi: 10.1001/jama.2013.5099.
 40. Hood, D. C. et al. (2011) 'Initial arcuate defects within the central 10 degrees in glaucoma', *Investigative Ophthalmology and Visual Science*, 52(2), pp. 940–946. doi: 10.1167/iovs.10-5803.
 41. Hood, D. C. et al. (2012) 'The Nature of Macular Damage in Glaucoma as Revealed by Averaging Optical Coherence Tomography Data', 1(1), pp. 1–15. doi: 10.1167/tvst.1.1.3.
 42. Hood, D. C. et al. (2013) 'Glaucomatous damage of the macula', *Progress in Retinal and Eye Research*. Elsevier Ltd, 32(1), pp. 1–21. doi: 10.1016/j.preteyeres.2012.08.003.
 43. Hood, D. C. (2017) 'Improving our understanding, and detection, of

- glaucomatous damage: An approach based upon optical coherence tomography (OCT)', *Progress in Retinal and Eye Research*. Elsevier Ltd, 57, pp. 46–75. doi: 10.1016/j.preteyeres.2016.12.002.
44. Huang, J. et al. (2011) 'Macular and retinal nerve fiber layer thickness measurements in normal eyes with the stratus OCT, the cirrus HD-OCT, and the topcon 3D OCT-1000', *Journal of Glaucoma*, 20(2), pp. 118–125. doi: 10.1097/IJG.0b013e3181d786f8.
 45. Huo, Y. J. et al. (2018) 'Age-related changes in and determinants of macular ganglion cell-inner plexiform layer thickness in normal Chinese adults', *Clinical and Experimental Ophthalmology*, 46(4), pp. 400–406. doi: 10.1111/ceo.13067.
 46. Ishikawa, H. et al. (2005) 'Macular segmentation with optical coherence tomography', *Investigative Ophthalmology and Visual Science*, 46(6), pp. 2012–2017. doi: 10.1167/iovs.04-0335.
 47. Kansal, V. et al. (2018) *Optical coherence tomography for glaucoma diagnosis: An evidence based meta-analysis*, PLoS ONE. doi: 10.1371/journal.pone.0190621.
 48. Kashani, A. H. et al. (2010) 'Retinal Thickness Analysis by Race, Gender, and Age Using Stratus OCT', *American Journal of Ophthalmology*. Elsevier Inc., 149(3), pp. 496–502.e1. doi: 10.1016/j.ajo.2009.09.025.
 49. Kaushik, S., S, P. and Ram J, S. (2003) *Neuroprotection in Glaucoma*, J Postgrad Med. India: J Postgrad Med. doi: <https://doi.org/10.4103/0022-3859.917>.
 50. Kerrigan-Baumrind, L. A. et al. (2000) 'Number of ganglion cells in glaucoma eyes compared with threshold visual field tests in the same persons', *Investigative Ophthalmology and Visual Science*, 41(3), pp. 741–748.
 51. Kim, M. J. et al. (2015) 'Comparison of macular GCIPL and peripapillary RNFL deviation maps for detection of glaucomatous eye with localized RNFL defect', *Acta Ophthalmologica*, 93(1), pp. e22–e28. doi: 10.1111/aos.12485.
 52. Kim, N. R. et al. (2011) 'Determinants of perimacular inner retinal layer thickness in normal eyes measured by fourier-domain optical coherence tomography', *Investigative Ophthalmology and Visual Science*, 52(6), pp. 3413–3418. doi: 10.1167/iovs.10-6648.
 53. Kim, Y. K. et al. (2015) 'Automated Detection of Hemifield Difference across Horizontal Raphe on Ganglion Cell-Inner Plexiform Layer Thickness Map', *Ophthalmology*. Elsevier Inc, 122(11), pp. 2252–2260. doi: 10.1016/j.ophtha.2015.07.013.
 54. Koh, V. T. et al. (2012) 'Determinants of ganglion cell-inner plexiform layer thickness measured by high-definition optical coherence tomography', *Investigative Ophthalmology and Visual Science*, 53(9), pp. 5853–5859. doi: 10.1167/iovs.12-10414.
 55. Kotera, Y. et al. (2010) 'Three-Dimensional Imaging of Macular Inner Structures in Glaucoma by Using Spectral-Domain Optical', (C), pp. 1412–1421. doi: 10.1167/iovs.10-5572.
 56. Kotowski, J. et al. (2011) 'Clinical use of OCT in assessing glaucoma progression.', *Ophthalmic surgery, lasers & imaging : the official journal of the International Society for Imaging in the Eye*, 42 Suppl, pp. 6–14. doi: 10.3928/15428877-20110627-01.

57. Lam, D. S. C. et al. (2007) 'Regional variations in the relationship between macular thickness measurements and myopia', *Investigative Ophthalmology and Visual Science*, 48(1), pp. 376–382. doi: 10.1167/iovs.06-0426.
58. Lederer, D. E. et al. (2003) 'Analysis of macular volume in normal and glaucomatous eyes using optical coherence tomography', *American Journal of Ophthalmology*, 135(6), pp. 838–843. doi: 10.1016/S0002-9394(02)02277-8.
59. Leung, C. K. S. et al. (2005) 'Comparison of macular and peripapillary measurements for the detection of glaucoma: An optical coherence tomography study', *Ophthalmology*, 112(3), pp. 391–400. doi: 10.1016/j.ophtha.2004.10.020.
60. Leung, C. K. S. et al. (2008) 'Comparison of macular thickness measurements between time domain and spectral domain optical coherence tomography', *Investigative Ophthalmology and Visual Science*, 49(11), pp. 4893–4897. doi: 10.1167/iovs.07-1326.
61. Lisboa, R. et al. (2013) 'Comparison of different spectral domain OCT scanning protocols for diagnosing preperimetric glaucoma', *Investigative Ophthalmology and Visual Science*, 54(5), pp. 3417–3425. doi: 10.1167/iovs.13-11676.
62. Manoj, V. (2019) 'A Prospective Analysis of Macular Volume and Thickness Parameters in Primary Open Angle Glaucoma Suspects and in Patients with Primary Open Angle Glaucoma Using Optical Coherence Tomography', 1(2), pp. 11–16.
63. Mathers, K., Rosdahl, J. A. and Asrani, S. (2014) 'Correlation of macular thickness with visual fields in glaucoma patients and suspects', *Journal of Glaucoma*, 23(2), pp. 98–104. doi: 10.1097/IJG.0b013e31829539c3.
64. Mauschitz, M. M. et al. (2019) 'Determinants of macular layers and optic disc characteristics on SD-OCT: The rhineland study', *Translational Vision Science and Technology*, 8(3). doi: 10.1167/tvst.8.3.34.
65. Medeiros, F. A. et al. (2005) 'Evaluation of retinal nerve fiber layer, optic nerve head, and macular thickness measurements for glaucoma detection using optical coherence tomography', *American Journal of Ophthalmology*, 139(1), pp. 44–55. doi: 10.1016/j.ajo.2004.08.069.
66. Medeiros, F. A. et al. (2013) 'Retinal ganglion cell count estimates associated with early development of visual field defects in glaucoma', *Ophthalmology*. Elsevier Inc., 120(4), pp. 736–744. doi: 10.1016/j.ophtha.2012.09.039.
67. Mohammadzadeh, V. et al. (2020) 'Macular imaging with optical coherence tomography in glaucoma', *Survey of Ophthalmology*. Elsevier Inc, 65(6), pp. 597–638. doi: 10.1016/j.survophthal.2020.03.002.
68. Moncada, S. & Higgs, A. (1993) 'L-Arginine-NO pathway', *The New England Journal of Medicine*, 329, pp. 2002–2012.
69. Moreno, P. A. M. et al. (2011) 'Spectral-domain optical coherence tomography for early glaucoma assessment: analysis of macular ganglion cell complex versus peripapillary retinal nerve fiber layer', *JCJO*. Elsevier Inc., 46(6), pp. 543–547. doi: 10.1016/j.jcjo.2011.09.006.
70. Mori, S. et al. (2010) 'Spectral-domain optical coherence tomography measurement of macular volume for diagnosing glaucoma', *Journal of Glaucoma*, 19(8), pp. 528–534. doi: 10.1097/IJG.0b013e3181ca7acf.

71. Mwanza, J. C., Oakley, J. D., et al. (2011) 'Macular ganglion cell-inner plexiform layer: Automated detection and thickness reproducibility with spectral domain-optical coherence tomography in glaucoma', *Investigative Ophthalmology and Visual Science*, 52(11), pp. 8323–8329. doi: 10.1167/iovs.11-7962.
72. Mwanza, J. C., Durbin, M. K., et al. (2011) 'Profile and predictors of normal ganglion cell-inner plexiform layer thickness measured with frequency-domain optical coherence tomography', *Investigative Ophthalmology and Visual Science*, 52(11), pp. 7872–7879. doi: 10.1167/iovs.11-7896.
73. Mwanza, J. C. et al. (2012) 'Glaucoma diagnostic accuracy of ganglion cell-inner plexiform layer thickness: Comparison with nerve fiber layer and optic nerve head', *Ophthalmology*. Elsevier Inc., 119(6), pp. 1151–1158. doi: 10.1016/j.ophtha.2011.12.014.
74. Mwanza, J. C. et al. (2014) 'Diagnostic performance of optical coherence tomography ganglion cell-inner plexiform layer thickness measurements in early glaucoma', *Ophthalmology*. American Academy of Ophthalmology, 121(4), pp. 849–854. doi: 10.1016/j.ophtha.2013.10.044.
75. Na, J. H. et al. (2012) 'Detection of glaucoma progression by assessment of segmented macular thickness data obtained using spectral domain optical coherence tomography', *Investigative Ophthalmology and Visual Science*, 53(7), pp. 3817–3826. doi: 10.1167/iovs.11-9369.
76. Na, R. K. et al. (2011) 'Comparing the ganglion cell complex and retinal nerve fibre layer measurements by Fourier domain OCT to detect glaucoma in high myopia', *British Journal of Ophthalmology*, 95(8), pp. 1115–1121. doi: 10.1136/bjo.2010.182493.
77. Naghizadeh, F. et al. (2014) 'Detection of early glaucomatous progression with different parameters of the RTVue optical coherence tomograph', *Journal of Glaucoma*, 23(4), pp. 195–198. doi: 10.1097/IJG.0b013e31826a9707.
78. Nakatani, Y. et al. (2011) 'Evaluation of macular thickness and peripapillary retinal nerve fiber layer thickness for detection of early glaucoma using spectral domain optical coherence tomography', *Journal of Glaucoma*, 20(4), pp. 252–259. doi: 10.1097/IJG.0b013e3181e079ed.
79. Neal, M. J. et al. (1994) 'Effects of Ischaemia on Neurotransmitter Release from the Isolated Retina', *Journal of Neurochemistry*, 62(3), pp. 1025–1033. doi: 10.1046/j.1471-4159.1994.62031025.x.
80. Nork, T. M. et al. (2000) 'Swelling and loss of photoreceptors in chronic human and experimental glaucomas', *Archives of Ophthalmology*, 118(2), pp. 235–245. doi: 10.1001/archopht.118.2.235.
81. Nouri-Mahdavi, K. et al. (2013) 'Macular ganglion cell/inner plexiform layer measurements by spectral domain optical coherence tomography for detection of early glaucoma and comparison to retinal nerve fiber layer measurements', *American Journal of Ophthalmology*. Elsevier Inc., 156(6), pp. 1297-1307.e2. doi: 10.1016/j.ajo.2013.08.001.
82. Ojima, T. et al. (2007) 'Measurement of retinal nerve fiber layer thickness and macular volume for glaucoma detection using optical coherence tomography', *Japanese Journal of Ophthalmology*, 51(3), pp. 197–203. doi: 10.1007/s10384-006-0433-y.
83. Oli, A. and Joshi, D. (2015) 'Can ganglion cell complex assessment on cirrus HD OCT aid in detection of early glaucoma?', *Saudi Journal of*

- Ophthalmology*. Saudi Ophthalmological Society, King Saud University, 29(3), pp. 201–204. doi: 10.1016/j.sjopt.2015.02.007.
- 84. Ooto, S. et al. (2011) 'Effects of age, sex, and axial length on the three-dimensional profile of normal macular layer structures', *Investigative Ophthalmology and Visual Science*, 52(12), pp. 8769–8779. doi: 10.1167/iovs.11-8388.
 - 85. Osborne, N. N. et al. (1999) 'Neuroprotection in relation to retinal ischemia and relevance to glaucoma', *Survey of Ophthalmology*, 43(6 SUPPL.), pp. 102–128. doi: 10.1016/S0039-6257(99)00044-2.
 - 86. Perera SA, et al (2015) 'Refractive Error, Axial Dimensions, and Primary Open-Angle Glaucoma', 128(7), pp. 900–905.
 - 87. Pokharel, A., Shrestha, G. S. and Shrestha, J. B. (2016) 'Macular thickness and macular volume measurements using spectral domain optical coherence tomography in normal nepalese eyes', *Clinical Ophthalmology*, 10, pp. 511–519. doi: 10.2147/OPTH.S95956.
 - 88. Provis, J. M. et al. (2005) 'Anatomy and development of the macula: Specialisation and the vulnerability to macular degeneration', *Clinical and Experimental Optometry*, 88(5), pp. 269–281. doi: 10.1111/j.1444-0938.2005.tb06711.x.
 - 89. Quigley, H. A. et al. (2000) 'Retrograde axonal transport of BDNF in retinal ganglion cells is blocked by acute IOP elevation in rats', *Investigative Ophthalmology and Visual Science*, 41(11), pp. 3460–3466.
 - 90. Quigley, H. A., Dunkelberger, G. R. and Green, W. R. (1989) 'Retinal ganglion cell atrophy correlated with automated perimetry in human eyes with glaucoma', *American Journal of Ophthalmology*. Elsevier Inc., 107(5), pp. 453–464. doi: 10.1016/0002-9394(89)90488-1.
 - 91. Raghubanshi, B. R. et al. (2014) 'Journal of Kathmandu Medical College, Vol. 3, No. 1, Issue 7, Jan.-Mar., 2014', 3(1), pp. 21–25.
 - 92. Raza, A. S. et al. (2011) 'Retinal ganglion cell layer thickness and local visual field sensitivity in glaucoma', *Archives of Ophthalmology*, 129(12), pp. 1529–1536. doi: 10.1001/archophthalmol.2011.352.
 - 93. Saini, C. and Shen, L. Q. (2020) 'Monitoring Glaucoma Progression with OCT', *Review of Ophthalmology*, (May), pp. 48–55.
 - 94. Sathyan, P. and Anitha, S. (2012) 'Optical coherence tomography in glaucoma', *Journal of Current Glaucoma Practice*, 6(1), pp. 1–5. doi: 10.5005/jp-journals-10008-1099.
 - 95. Schlamp, C. L. et al. (2006) 'Progressive ganglion cell loss and optic nerve degeneration in DBA/2J mice is variable and asymmetric', *BMC Neuroscience*, 7, pp. 1–14. doi: 10.1186/1471-2202-7-66.
 - 96. Schulze, A. et al. (2011) 'Diagnostic ability of retinal ganglion cell complex, retinal nerve fiber layer, and optic nerve head measurements by Fourier-domain optical coherence tomography', *Graefe's Archive for Clinical and Experimental Ophthalmology*, 249(7), pp. 1039–1045. doi: 10.1007/s00417-010-1585-5.
 - 97. Sciences, C. (2015) 'Macular Thickness Changes in Glaucomatous Optic Neuropathy Detected Using Optical Coherence Tomography', 121.
 - 98. Scuderi, G. et al. (2020) 'Ganglion cell complex analysis in glaucoma patients: What can it tell us?', *Eye and Brain*, 12, pp. 33–44. doi: 10.2147/EB.S226319.
 - 99. Seong, M. et al. (2010) 'Macular and peripapillary retinal nerve fiber layer

- measurements by spectral domain optical coherence tomography in normal-tension glaucoma', *Investigative Ophthalmology and Visual Science*, 51(3), pp. 1446–1452. doi: 10.1167/iovs.09-4258.
100. Sharma, A. et al. (2014) 'Macular thickness variability in primary open angle glaucoma patients using optical coherence tomography', *Journal of Current Glaucoma Practice*, 8(1), pp. 10–14. doi: 10.5005/jp-journals-10008-1154.
 101. Sharma, D. A. and Yadav, D. H. (2019) 'Comparison of macular parameters in primary open angle glaucoma patients using cirrus optical coherence tomography', *Tropical Journal of Ophthalmology and Otolaryngology*, 4(5), pp. 306–313. doi: 10.17511/jooo.2019.i05.01.
 102. Shin, J. W. et al. (2017) 'Ganglion Cell–Inner Plexiform Layer Change Detected by Optical Coherence Tomography Indicates Progression in Advanced Glaucoma', *Ophthalmology*. American Academy of Ophthalmology, 124(10), pp. 1466–1474. doi: 10.1016/j.ophtha.2017.04.023.
 103. Sihota, R. et al. (2006) 'Diagnostic capability of optical coherence tomography in evaluating the degree of glaucomatous retinal nerve fiber damage', *Investigative Ophthalmology and Visual Science*, 47(5), pp. 2006–2010. doi: 10.1167/iovs.05-1102.
 104. Steven M. Singer#, Marc Y. Fink, V. V. A. (2019) '乳鼠心肌提取 HHS Public Access', *Physiology & behavior*, 176(3), pp. 139–148. doi: 10.1016/j.ajo.2016.11.010.Estimating.
 105. Sull, A. C. et al. (2010) 'Comparison of spectral/Fourier domain optical coherence tomography instruments for assessment of normal macular thickness', *Retina*, 30(2), pp. 235–245. doi: 10.1097/IAE.0b013e3181bd2c3b.
 106. Sung, K. R. et al. (2012) 'Macular assessment using optical coherence tomography for glaucoma diagnosis', *British Journal of Ophthalmology*, 96(12), pp. 1452–1455. doi: 10.1136/bjophthalmol-2012-301845.
 107. Susanna Jr., R. and Vessani, R. M. (2009) 'Staging Glaucoma Patient: Why and How?', *The Open Ophthalmology Journal*, 3(2), pp. 59–64. doi: 10.2174/1874364100903020059.
 108. Takayama, K. et al. (2012) 'A novel method to detect local ganglion cell loss in early glaucoma using spectral-domain optical coherence tomography', *Investigative Ophthalmology and Visual Science*, 53(11), pp. 6904–6913. doi: 10.1167/iovs.12-10210.
 109. Takeyama, A. et al. (2014) 'Influence of axial length on ganglion cell complex (GCC) thickness and on GCC thickness to retinal thickness ratios in young adults', *Japanese Journal of Ophthalmology*, 58(1), pp. 86–93. doi: 10.1007/s10384-013-0292-2.
 110. Tan, O. et al. (2007) 'Mapping of Macular Substructures with Optical Coherence Tomography for', pp. 949–956. doi: 10.1016/j.ophtha.2007.08.011.
 111. Tan, O. et al. (2009) 'Detection of Macular Ganglion Cell Loss in Glaucoma by Fourier-Domain Optical Coherence Tomography', *Ophthalmology*. Elsevier Inc., 116(12), pp. 2305-2314.e2. doi: 10.1016/j.ophtha.2009.05.025.
 112. Tham, Y. C. et al. (2014) 'Global prevalence of glaucoma and

- projections of glaucoma burden through 2040: A systematic review and meta-analysis', *Ophthalmology*. Elsevier Inc, 121(11), pp. 2081–2090. doi: 10.1016/j.ophtha.2014.05.013.
113. Traynis, I. et al. (2014) 'Prevalence and nature of early glaucomatous defects in the central 10° of the visual field', *JAMA Ophthalmology*, 132(3), pp. 291–297. doi: 10.1001/jamaophthalmol.2013.7656.
 114. Um, T. W. et al. (2012) 'Asymmetry in hemifield macular thickness as an early indicator of glaucomatous change', *Investigative Ophthalmology and Visual Science*, 53(3), pp. 1139–1144. doi: 10.1167/iovs.11-8373.
 115. Ustaoglu, M., Solmaz, N. and Onder, F. (2019) 'Discriminating performance of macular ganglion cell-inner plexiform layer thicknesses at different stages of glaucoma', *International Journal of Ophthalmology*, 12(3), pp. 464–471. doi: 10.18240/ijo.2019.03.18.
 116. Wagner-Schuman, M. et al. (2011) 'Race- and sex-related differences in retinal thickness and foveal pit morphology', *Investigative Ophthalmology and Visual Science*, 52(1), pp. 625–634. doi: 10.1167/iovs.10-5886.
 117. Wang (2010) 'Measurement of local retinal ganglion cell layer thickness in patients with glaucoma using frequency-domain optical coherence tomography (Archives of Ophthalmology (2009) 127, 7, (875-881))', *Archives of Ophthalmology*, 128(9), p. 1150. doi: 10.1001/archophthalmol.2010.198.
 118. Wang, M. et al. (2014) 'Combining information from 3 anatomic regions in the diagnosis of glaucoma with time-domain optical coherence tomography', *Journal of Glaucoma*, 23(3), pp. 129–135. doi: 10.1097/JG.0b013e318264b941.
 119. Weinreb, R. N. et al. (2004) 'Risk assessment in the management of patients with ocular hypertension', *American Journal of Ophthalmology*, 138(3), pp. 458–467. doi: 10.1016/j.ajo.2004.04.054.
 120. Weinreb, R. N., Aung, T. and Medeiros, F. A. (2014) 'The pathophysiology and treatment of glaucoma: A review', *JAMA - Journal of the American Medical Association*, 311(18), pp. 1901–1911. doi: 10.1001/jama.2014.3192.
 121. Weinreb, R. N. and Tee Khaw, P. (2004) 'Primary open-angle glaucoma', *Lancet*, 363(9422), pp. 1711–1720. doi: 10.1016/S0140-6736(04)16257-0.
 122. WoldeMussie, E. et al. (2001) 'Neuroprotection of retinal ganglion cells by brimonidine in rats with laser-induced chronic ocular hypertension', *Investigative Ophthalmology and Visual Science*, 42(12), pp. 2849–2855.
 123. Wollstein, G. et al. (2004) 'Optical coherence tomography (OCT) macular and peripapillary retinal nerve fiber layer measurements and automated visual fields', *American Journal of Ophthalmology*, 138(2), pp. 218–225. doi: 10.1016/j.ajo.2004.03.019.
 124. Wollstein, G. et al. (2005) 'Comparison of three optical coherence tomography scanning areas for detection of glaucomatous damage', *American Journal of Ophthalmology*, 139(1), pp. 39–43. doi: 10.1016/j.ajo.2004.08.036.
 125. Xu, X. et al. (2017) 'Diagnostic ability of macular ganglion cell-inner

- plexiform layer thickness in glaucoma suspects', *Medicine (United States)*, 96(51). doi: 10.1097/MD.00000000000009182.
126. Yang, Z. et al. (2015) 'Diagnostic ability of macular ganglion cell inner plexiform layer measurements in glaucoma using swept source and spectral domain optical coherence tomography', *PLoS ONE*, 10(5), pp. 1–18. doi: 10.1371/journal.pone.0125957.
127. Yolanda, S., Primitasari, Y. and Sari, D. R. (2021) 'Characteristics of Primary Open-Angle Glaucoma Patients in Dr. Soetomo General Hospital Surabaya', *JUXTA: Jurnal Ilmiah Mahasiswa Kedokteran Universitas Airlangga*, 12(1), p. 6. doi: 10.20473/juxta.v12i12021.6-9.
128. Yuan, L. and Neufeld, A. H. (2000) '肿瘤坏死因子- : Glia在人青光眼视神经头部产生的一种潜在的神经破坏性细胞因子', 50(May), pp. 42–50.
129. Zeimer, R. et al. (1998) 'Quantitative detection of glaucomatous damage at the posterior pole by retinal thickness mapping: A pilot study', *Ophthalmology*, 105(2), pp. 224–231. doi: 10.1016/S0161-6420(98)92743-9.
130. Zhao, Z. and Jiang, C. (2013) 'Effect of myopia on ganglion cell complex and peripapillary retinal nerve fibre layer measurements: A fourier-domain optical coherence tomography study of young Chinese persons', *Clinical and Experimental Ophthalmology*, 41(6), pp. 561–566. doi: 10.1111/ceo.12045.

LAMPIRAN 1. REKOMENDASI PERSETUJUAN ETIK



REKOMENDASI PERSETUJUAN ETIK

Nomor : 10/UN4.6.4.5.31/ PP36/ 2023

Tanggal: 3 Januari 2023

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

No Protokol	UH22110728	No Sponsor Protokol	
Peneliti Utama	dr. Herin Arini Natalia	Sponsor	
Judul Peneliti	PERBANDINGAN ANTARA HUBUNGAN KETEBALAN LAPISAN RETINAL NERVE FIBER LAYER (RNFL) PERIPAPIL DAN KETEBALAN MAKULA TERHADAP DEFEK LAPANGAN PANDANG PADA PASIEN GLAUKOMA		
No Versi Protokol	2	Tanggal Versi	29 Desember 2022
No Versi PSP	2	Tanggal Versi	29 Desember 2022
Tempat Penelitian	Klinik Mata JEC-Orbita Makassar		
Jenis Review	<input type="checkbox"/> Exempted <input checked="" type="checkbox"/> Expedited <input type="checkbox"/> Fullboard Tanggal	Masa Berlaku 3 Januari 2023 sampai 3 Januari 2024	Frekuensi review lanjutan
Ketua KEP Universitas Hasanuddin	Nama Prof.Dr.dr. Suryani As'ad, M.Sc.,Sp.GK (K)	Tanda tangan	
Sekretaris KEP Universitas Hasanuddin	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 protokol yang disetujui (protocol deviation / violation)
- Mematuhi semua peraturan yang ditentukan

LAMPIRAN 2. LEMBAR FORMULIR PERSETUJUAN

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

FORMULIR PERSETUJUAN SETELAH PENJELASAN

Saya yang bertandatangan di bawah ini :

Nama :

Umur :

Masa Kerja :

Satuan :

Alamat :

setelah mendengar/membaca dan mengerti penjelasan yang diberikan mengenai tujuan, manfaat, dan apa yang akan dilakukan pada penelitian ini, menyatakan setuju untuk ikut dalam penelitian ini secara sukarela tanpa paksaan.

Saya tahu bahwa keikutsertaan saya ini bersifat sukarela tanpa paksaan, sehingga saya bisa menolak ikut atau mengundurkan diri dari penelitian ini. Saya berhak bertanya atau meminta penjelasan pada peneliti bila masih ada hal yang belum jelas atau masih ada hal yang ingin saya ketahui tentang penelitian ini.

Saya juga mengerti bahwa semua biaya yang dikeluarkan sehubungan dengan penelitian ini, akan ditanggung oleh peneliti. Saya percaya bahwa keamanan dan kerahasiaan data penelitian akan terjamin dan saya dengan ini menyetujui semua data saya yang dihasilkan pada penelitian ini untuk disajikan dalam bentuk lisan maupun tulisan.

Dengan membubuhkan tandatangan saya di bawah ini, saya menegaskan keikutsertaan saya secara sukarela dalam studi penelitian ini.

Nama	Tanda tangan	Tgl/Bln/Thn
Responden
/Wali
Saksi

(Tanda Tangan Saksi diperlukan hanya jika Partisipan tidak dapat memberikan consent/persetujuan sehingga menggunakan wali yang sah secara hukum, yaitu untuk partisipan berikut:

1. Berusia di bawah 18 tahun
2. Usia lanjut
3. Gangguan mental
4. Pasien tidak sadar

5. Dan lain-lain kondisi yang tidak memungkinkan memberikan persetujuan

Penanggungjawab penelitian :

dr. Herin Arini Natalia
BTP Blok A No. 192, Tamalanrea, Kota Makassar
Telp. 081244026939

Penanggungjawab medik :

Dr. dr. Noro Waspodo, Sp.M
Jl. Monginsidi No.126 , Kota Makassar
Telp. 082188587363

LAMPIRAN 3. MASTER DATA PENELITIAN

Kelompok POAG

no	Nama	Usia	Jenis Kelamin	Diagnosis		Penyakit Sistemik	SE (Dioptri)		BCVA (logMar)		Ti
				OD	OS		OD	OS	OD	OS	
1	Tn. AL	42	L		POAG advance	no		0		0.18	
2	Ny. FT	56	P	POAG moderat	POAG early	no	0	0	0.30	0.30	26
3	Tn. MK	27	L	POAG early	POAG early	no	-1.75	-1.75	0.00	0.00	27
4	Ny. EA	47	P	POAG early	POAG moderat	no	-4.87	-5.8	0.00	0.00	23
5	Tn. SA	69	L	POAG early		HT	0		0.30		26
6	Tn. MY	64	L		POAG advance	no		0		1.80	
7	Ny. DI	57	P		POAG advance	no		0		0.18	
8	Nn. NA	18	P	POAG early	POAG early	no	-1.75	-1.50	0.00	0.00	29
9	Ny. DE	57	P	POAG advance		no	0		0.18		28
10	Ny. RB	48	P	POAG advance	POAG moderat	no	-2.25	-3.62	0.40	0.48	47
11	Tn. AR	25	L	POAG early		no	0		0.00		21
12	Ny. KS	42	P		POAG early	no		0		0.00	
13	Tn. P	29	L	POAG early	POAG early	no	0	-0.25	0.00	0.18	25
14	Nn. RA	20	P	POAG early	POAG early	no	-4.00	-4.00	0.10	0.10	24
15	Ny. YO	41	P	POAG moderat	POAG early	no	0	0	0.00	0.00	24
16	Tn. MI	23	L	POAG advance	POAG advance	no	-3.50	-4.00	1.30	2.30	39
17	Tn. JA	39	L	POAG advance	POAG advance	HT	-1.00	C-1.00	0.00	0.30	29
18	Tn. HN	60	L	POAG advance		no	+0.13		0.30		28
19	Ny. S	49	P	POAG early		HT	0		0.18		25
20	Ny. NA	61	P	POAG early		no	-1.00		0.18		28
21	Tn. N	62	L	POAG advance	POAG advance	HT	-2.75	-3.00	0.78	0.60	42
22	Tn. SD	47	L	POAG advance		no	0		0.18		29
23	Tn. HD	45	L	POAG advance		no	-1.00		0.10		55
24	Ny. NU	66	P	POAG advance		DM	+0.50		0.18		26
25	Tn. K	36	L		POAG early	no		-3.12		0.00	

O	CCT		Humphrey																				
OS	OD	OS	OD		OS		RNFL																
			24/2		24/2		OD					OS											
			MD	PSD	MD	PSD	S	N	I	T	AVER	S	N	I	T	AVER	S	NS	NI	I	TI		
26		517			-17.52	9.10						116	74	68	65	80							
23	539	544	-7.28	6.97	-6.34	4.16	91	59	135	58	86	96	63	135	59	88	75	79	80	78	78		
26	550	556	-0.13	2.54	-1.16	3.33	138	68	147	79	108	140	76	140	76	108	89	95	93	87	87		
23	510	508	-3.04	2.99	-11.19	4.88	126	71	108	71	94	98	63	85	66	78	73	74	73	66	67		
	528		-3.82	1.36			93	62	108	69	83						70	70	59	68	72		
49		505			-32.11	1.63						65	59	62	50	59							
25		520			-23.50	10.59						62	67	57	51	59							
38	625	626	-1.76	2.04	-2.69	2.32	126	50	120	64	90	119	49	172	62	89	88	91	85	77	79		
	503		-27.52	9.32			63	46	50	44	51						60	64	61	52	54		
25	515	513	-30.39	6.28	-7.44	2.83	52	61	70	47	57	185	85	148	72	123	69	73	65	56	50		
	528		-1.84	1.85			118	74	131	51	94						80	85	73	79	77		
24		518			-2.34	2.08						145	74	140	65	106							
26	602	615	-3.27	5.73	-5.85	6.55	119	72	106	60	89	113	57	97	67	83	88	86	73	70	78		
23	530	535	-0.39	1.59	-1.12	1.89	99	68	100	63	82	88	67	104	55	79	75	75	74	71	73		
24	521	519	-9.12	9.83	-4.80	3.41	115	65	103	63	86	127	57	125	69	95	75	75	78	76	78		
25	510	512	-34.49	1.46	-34.07	3.14	56	50	47	52	51	45	48	44	52	47	53	53	56	56	53		
27	524	522	-31.00	7.55	-32.66	4.00	71	61	62	65	65	67	63	67	63	65	59	65	64	56	54		
	508		-32.14	2.24			82	68	80	64	74						64	63	59	59	57		
	521		-5.25	1.53			105	68	115	67	89						71	77	78	76	73		
	541		-2.78	1.64			49	53	84	65	62						76	80	86	76	68		
38	516	449	-29.92	4.30	-28.64	6.48	48	39	64	63	54	65	59	62	50	59	55	55	52	55	51		
	548		-26.90	11.42			80	62	63	51	64						60	64	61	52	54		
	511		-28.41	10.84			66	55	66	43	57						43	47	51	46	46		
	518		-23.54	10.62			54	54	45	47	50						68	68	62	54	52		
28		516			-2.86	5.70						109	30	115	60	79							

OCT																		
GCIPL (GCL+IPL)												TMT						
			OS									OD						
TS	AVE	MIN	S	NS	NI	I	TI	TS	AVER	MIN	SO	SI	TO	TI	IO	II	NO	CEN
			78	92	78	63	75	85	78	62	302	357	275	339	285	361	335	369
73	77	75	73	80	78	68	75	75	75	62	260	312	246	301	255	314	288	320
90	90	89	88	90	90	82	85	88	87	85	304	348	284	335	282	341	325	347
77	72	66	73	77	72	68	64	70	71	66	276	320	247	301	255	308	308	376
74	69	60									253	293	240	294	234	296	261	305
			51	51	49	47	44	46	48	41							240	280
			67	80	76	77	77	81	76	61							260	307
82	84	79	88	92	86	81	81	81	85	83	274	312	241	297	250	297	298	315
60	58	48									282	319	242	267	224	264	262	294
57	62	46	91	95	90	85	92	89	90	81	250	287	285	283	229	261	232	248
80	79	67									269	307	248	294	260	306	293	321
			75	77	76	75	76	75	76	71							270	285
85	80	69	77	85	85	79	71	80	80	74	272	311	251	299	290	288	280	308
73	74	73	76	77	72	70	74	73	74	71	250	290	227	278	250	286	272	295
74	76	75	69	48	76	73	75	73	69	27	225	263	239	264	215	268	208	249
48	53	41	54	56	54	52	44	51	52	41	237	273	231	266	226	264	240	273
57	59	50	52	59	56	54	51	49	54	44	257	299	250	276	245	286	260	254
54	59	50									240	272	223	256	227	260	254	274
70	74	71									263	305	257	297	260	309	291	302
66	75	69									233	320	236	315	255	331	179	315
50	63	47	51	51	49	47	44	46	48	41	231	261	214	253	213	258	242	273
60	58	48									282	319	242	267	224	264	262	294
46	46	43									243	275	224	262	220	274	260	293
62	61	49									251	302	228	268	230	267	261	294
			72	74	73	73	75	71	73	74							261	299

OS					
TI	IO	II	NO	NI	CEN
323	262	324	310	358	295
301	248	299	286	316	228
329	275	333	321	342	264
301	258	312	306	320	280
<hr/>					
273	227	274	245	283	239
305	270	322	278	328	240
300	258	306	293	315	253
<hr/>					
291	272	308	311	300	224
<hr/>					
279	264	287	280	286	219
298	250	310	285	316	251
291	261	300	291	308	255
243	218	260	230	257	196
262	227	263	238	276	236
252	242	268	273	296	230
<hr/>					
273	227	274	245	283	239
<hr/>					
307	251	298	245	291	228

Kelompok Non Glaukoma (OHT + Suspek glaukoma)

no	Nama	Usia	Jenis Kelamin	Diagnosis		penyakit sistemik	SE (Dioptri)		BCVA (logMar)		Ti
							OD	OS	OD	OS	
1	Ny. HS	27	P	Hipertensi Okular	Hipertensi Okular	no	-1.72	-0.87	0.00	0.00	22
2	Ny. HI	37	P	Hipertensi Okular	Hipertensi Okular	no	+0.12	+0.12	0.00	0.00	23
3	Ny. D	29	P	Hipertensi Okular	Hipertensi Okular	no	-1.00	-2.62	0.00	0.00	22
4	Ny. YS	44	P	Hipertensi Okular	Hipertensi Okular	no	0	0	0.00	0.00	24
5	Ny. SK	45	P	Hipertensi Okular	Hipertensi Okular	no	0	0	0.00	0.00	22
6	Nn. WN	22	P	Hipertensi Okular	Hipertensi Okular	no	-0.75	-1.25	0.00	0.00	21
7	Ny. M	51	P	Hipertensi Okular	Hipertensi Okular	DM	+0.25	0	0.10	0.10	26
8	Ny. JL	43	P	POAG suspect	POAG suspect	no	+2.75	+2.75	0.00	0.00	23
9	Tn. MF	18	L	Hipertensi Okular	POAG suspect	no	-0.37	-0.50	0.18	0.18	24
10	Ny. TS	28	P	POAG suspect	POAG suspect	no	-1.50	-1.00	0.00	0.00	28
11	Ny. NU	66	P		POAG suspect	DM	1	-0.37		0.18	
12	Nn. NG	19	P	POAG suspect	POAG suspect	no	0	0	0.00	0.00	20
13	Ny. AH	61	P	POAG suspect	POAG suspect	HT	0	0	0.00	0.00	19
14	Ny. SM	58	P	POAG suspect	Hipertensi Okular	HT	+0.75	+0.75	0.10	0.18	18
15	Tn. KH	36	L	POAG suspect		no	-2.75	0	0.10		27
16	Ny. MU	42	P	POAG Suspect	POAG Suspect	no	0	0	0.00	0.10	20
17	Tn. HD	45	L		Hipertensi Okular	no		-1.37		0.10	

o	CCT		Humphrey																				
	OS	OD	OS	OD		OS		RNFL															
				24/2		24/2		OD				OS								OD			
				MD	PSD	MD	PSD	S	N	I	T	AVER	S	N	I	T	AVER	S	NS	NI	I	TI	
23	523	519	-0.85	1.44	-0.95	2.05	151	64	138	78	108	156	58	132	72	104	78	80	78	78	75		
24	544	550	-0.01	1.36	-0.83	1.33	118	72	147	78	104	119	69	133	74	99	88	89	87	81	85		
24	507	504	-0.57	1.75	+0.94	1.33	141	84	133	69	107	125	82	123	64	99	86	91	89	83	83		
26	580	584	-1.92	1.97	-0.85	1.44	117	67	141	74	100	141	69	136	78	106	79	81	79	74	77		
23	516	518	-2.06	1.57	-0.79	1.26	118	63	134	98	103	128	67	141	72	102	90	87	88	86	93		
27	522	528	-0.96	1.95	+0.52	1.60	116	67	143	71	99	147	71	151	74	111	84	86	87	82	80		
25	560	564	-3.16	1.80	-1.12	1.84	152	71	111	67	100	115	69	114	57	89	79	79	81	76	79		
24	507	504	-3.90	1.39	-3.88	1.62	116	92	118	65	98	111	74	107	55	87	80	86	86	81	76		
24	570	580	-4.40	3.04	-7.97	3.61	145	72	129	56	100	129	67	122	55	94	84	86	86	81	82		
33	610	608	+0.25	1.34	-1.19	2.00	128	79	151	78	109	142	82	142	77	111	82	85	79	78	81		
18		520			-1.14	1.94						105	57	104	53	80							
20	537	538	-1.89	1.84	-2.79	2.12	125	79	119	76	100	123	78	127	73	100	91	94	92	89	90		
20	562	565	-3.60	2.30	-3.89	2.70	108	60	94	74	84	114	72	92	74	88	83	87	73	69	73		
28	543	540	-0.43	1.48	-3.08	1.57	94	58	129	59	85	107	51	120	54	83	80	83	78	74	76		
	518		-1.47	1.49			76	52	101	58	72						67	72	71	72	75		
21	542	554	-4.17	3.35	-4.68	2.58	106	73	145	67	98	121	77	125	63	96	89	84	82	81	79		
25		515			-2.06	2.13						102	69	121	57	87							

OCT																							
GCIPL (GCL+IPL)												TMT											
			OS									OD											
TS	AVE	MIN	S	NS	NI	I	TI	TS	AVER	MIN	SO	SI	TO	TI	IO	II	NO	NO	CEN	SO	SI	TO	
75	77	74	77	81	80	77	78	75	78	76	278	317	249	294	270	310	302	324	240	273	310	262	
81	85	82	87	89	85	77	76	79	82	78	279	317	247	304	264	321	306	327	256	275	320	259	
81	86	81	82	80	81	85	88	87	84	82	276	293	301	303	260	301	253	285	212	270	294	245	
75	78	74	83	81	78	78	85	85	82	77	260	297	248	289	261	293	279	299	223	266	297	252	
90	89	86	62	73	86	88	79	59	74	57	297	332	276	326	283	333	310	331	260	256	297	248	
77	83	77	88	88	85	81	82	81	84	78	262	297	256	289	257	300	281	296	218	269	299	253	
76	78	77	85	88	85	80	77	79	82	78	273	306	255	301	259	308	285	312	250	274	313	254	
77	81	81	80	89	86	80	75	75	81	74	260	294	246	281	266	298	291	303	213	262	298	245	
79	83	82	85	88	86	81	79	83	84	81	275	310	246	295	253	303	290	314	240	285	323	253	
81	81	75	81	83	80	77	82	82	81	77	279	305	258	293	273	303	308	310	248	287	320	265	
			79	77	76	74	71	73	75	74										296	236		
88	91	91	92	96	90	88	91	89	91	89	301	323	273	310	288	312	321	323	264	311	335	267	
72	76	71	74	79	81	75	74	71	76	74	267	315	236	291	241	299	289	312	228	251	305	238	
78	78	75	77	80	77	76	77	76	77	76	277	316	250	303	247	295	280	314	266	264	306	244	
68	71	69									248	298	269	310	244	302	242	294	233				
81	83	78	88	88	81	76	77	78	81	78	268	295	242	284	253	291	265	298	220	271	286	237	
			73	71	66	72	71	68	70	68									267	306	242		

OS					
TI	IO	II	NO	NI	CEN
297	268	303	288	311	237
304	257	312	298	323	254
284	264	295	298	300	218
296	253	302	280	299	226
304	289	333	298	321	247
285	258	292	282	295	216
302	263	314	295	325	256
278	261	296	290	304	215
301	254	305	294	322	251
305	270	307	311	319	257
280	249	296	278	309	198
305	296	318	324	333	268
289	243	308	291	307	203
293	249	292	277	307	255
287	242	294	272	298	220
293	246	300	274	307	245

Kelompok Normal

no	Nama	Usia	Jenis Kelamin	Diagnosis		penyakit sistemik	SE (Dioptri)		BCVA (logMar)		Ti
				OD	OS		OD	OS	OD	OS	
1	Ny. AF	30	P	Emetrop	Emetrop	no	0	0	0.00	0.00	16
2	Ny. EV	34	P	Compound Miopia Astigmat	Compound Miopia Astigmat	no	-5.25	-5.00	0.00	0.00	14
3	Ny. SE	29	P	Miopia	Miopia	no	-4.00	-3.50	0.00	0.00	17
4	Nn. NU	28	P	Emetrop	Emetrop	no	0	0	0.00	0.00	20
5	Nn. RA	28	P	Miopia Levior		no	-2.00		0.00		18
6	Nn. MM	27	P	Miopia Levior	Miopia Levior	no	-1.75	-2.00	0.00	0.00	15
7	Nn. HU	29	P	Emetrop	Emetrop	no	0	0	0.00	0.00	12
8	Nn. CS	31	P	Emetrop	Miopia Levior	no	0	-2.00	0.00	0.00	17
9	Tn. MK	28	L	Emetrop	Emetrop	no	0	0	0.00	0.00	13
10	Nn. AA	29	P	Emetrop	Emetrop	no	0	0	0.00	0.00	18
11	Ny. FA	28	P	Simple Miopia Astigmat	Simple Miopia Astigmat	no	-0.25	-0.37	0.00	0.00	19
12	Ny. KH	32	P	Miopia	Miopia	no	-0.25	-0.25	0.00	0.00	13
13	Ny. SN	55	P	Emetrop		no	0		0.18		10
14	Ny. DI	57	P	Emetrop		no	0		0.10		16
15	Ny. SY	63	P		Emetrop	HT	0	0		0.00	
16	Ny. SU	63	P	Emetrop	Emetrop	HT	0	0	0.30	0.40	18
17	Ny. HR	32	P	Miopia	Miopia	no	-0.75	-1.00	0.00	0.00	19
18	Tn. MY	64	L	Emetrop		no	0		0.40		15
19	Tn. AD	43	L	Emetrop	Emetrop	no	0	0	0.00	0.00	12
20	Tn. SD	42	L	Emetrop	Emetrop	no	0	0	0.10	0.10	15

o	CCT		Humphrey																				
	OS	OD	OS	OD		OS		RNFL															
				24/2		24/2		OD				OS								OD			
				MD	PSD	MD	PSD	S	N	I	T	AVER	S	N	I	T	AVER	S	NS	NI	I	TI	
12	528	527	-1.94	1.87	-0.16	1.77	122	74	158	70	106	127	67	141	62	99	88	89	88	88	87		
18	533	550	-0.12	1.29	-1.79	2.28	123	74	138	54	97	133	70	127	57	97	88	89	87	81	85		
15	561	558	-0.19	1.43	-0.12	1.32	126	62	112	75	94	127	62	122	68	95	79	79	81	75	78		
18	537	542	-1.32	1.64	-1.72	2.00	133	72	147	84	109	151	61	143	80	109	91	92	90	86	90		
	539		-0.89	1.00			115	86	129	55	96						78	80	79	75	75		
16	527	531	-1.45	1.90	-0.79	1.78	113	60	118	74	91	115	60	107	70	88	78	80	78	78	75		
14	552	549	-0.62	1.34	-2.02	1.65	126	77	137	53	98	135	77	146	51	102	88	87	85	84	82		
19	541	538	-0.85	1.08	-0.02	1.59	112	74	148	84	104	126	72	137	76	103	90	87	88	89	89		
11	580	575	-0.14	1.20	-1.23	1.48	122	69	120	67	96	109	65	121	63	90	87	89	88	84	82		
12	544	535	-0.45	1.57	-0.09	1.15	146	68	173	86	118	142	67	167	69	111	80	83	83	85	82		
19	547	561	-0.19	1.12	-2.14	1.64	126	70	148	70	104	146	65	145	68	106	79	82	84	80	76		
17	504	507	-1.43	1.28	-0.64	1.31	121	73	120	76	97	127	64	128	73	98	82	84	82	81	79		
	530		-3.39	1.53			112	65	117	63	89						78	78	76	79	81		
	526		-2.25	1.20			117	71	120	68	94						79	85	85	84	85		
15	521	528		-0.15	1.64							122	69	134	60	96							
17	567	541	-1.79	2.25	-0.77	1.73	120	74	136	64	98	132	75	142	63	103	79	81	80	77	80		
20	520	522	-0.95	1.14	-0.14	1.20	147	65	153	72	109	157	76	155	65	113	95	94	91	92	92		
	615		-2.06	1.57			145	71	114	68	99						73	64	70	72	76		
14	580	584	-1.92	1.97	-0.85	1.44	117	67	141	74	100	141	69	136	78	106	79	81	79	74	77		
16	542	554	-4.17	3.35	-0.77	1.65	106	73	145	67	98	121	77	125	63	96	89	84	82	81	79		

OCT																							
GCIPL (GCL+IPL)												TMT											
			OS									OD											
TS	AVE	MIN	S	NS	NI	I	TI	TS	AVER	MIN	SO	SI	TO	TI	IO	II	NO	NO	CEN	SO	SI	TO	
87	88	86	87	90	87	87	86	87	87	85	272	305	257	295	260	299	280	302	217	275	309	257	
81	85	82	87	89	85	77	76	79	82	78	279	317	247	304	264	321	306	327	256	275	320	259	
75	78	76	81	81	80	78	80	78	80	78	267	301	249	291	263	302	285	304	219	266	298	249	
89	90	86	91	92	88	86	92	93	90	86	289	317	266	302	266	308	298	313	256	296	319	272	
75	77	70									266	288	243	263	258	279	288	290	214				
75	77	74	77	81	80	77	78	75	78	76	278	317	249	294	270	310	302	324	240	273	310	262	
85	85	83	89	90	86	82	82	83	85	81	278	320	259	305	258	309	288	314	250	280	308	251	
89	89	88	86	86	84	73	83	83	82	73	294	328	274	312	295	326	311	322	239	289	323	269	
82	85	81	84	87	88	88	84	83	86	84	283	305	250	286	266	302	305	298	210	278	308	251	
78	82	77	83	85	84	83	79	81	82	79	293	326	270	316	288	330	309	324	221	295	327	270	
73	79	74	78	84	84	83	75	71	79	73	266	294	236	282	250	293	284	292	188	263	296	234	
81	82	80	84	85	81	79	78	79	81	79	266	303	240	286	253	297	287	303	205	269	305	240	
81	79	76									276	312	268	301	277	308	285	309	239				
81	83	77									269	306	261	305	270	313	294	308	216				
			80	79	78	78	78	75	78	72									267	297	247		
82	80	75	81	81	80	76	75	74	78	74	278	293	266	289	268	302	289	292	220	265	283	279	
88	92	86	91	95	94	92	92	89	92	87	293	317	274	301	280	314	303	311	215	286	311	276	
76	72	62									258	315	278	315	261	313	259	315	249				
75	78	74	83	81	78	78	85	85	82	77	260	297	248	289	261	293	279	299	223	266	297	252	
81	83	78	88	88	81	76	77	78	81	78	268	295	242	284	253	291	265	298	220	271	286	237	

OS					
TI	IO	II	NO	NI	CEN
296	260	304	283	305	222
304	257	312	298	323	254
289	255	302	282	301	214
302	268	307	293	312	251
297	268	303	288	311	237
294	258	304	294	312	243
309	271	309	303	317	243
283	265	296	303	297	207
312	286	325	315	327	222
281	254	293	286	294	186
286	253	292	291	303	206
280	252	291	277	291	241
273	249	277	242	270	203
296	277	313	305	309	208
296	253	302	280	299	226
287	242	294	272	298	220

