

## DAFTAR PUSTAKA

- Adams, J.G. 2013. Emergency medicine clinical essentials. Saunders. USA. 100:870-880.
- Ahmed, N., Wahlgren, G., Brainin, M. 2009. Relationship of blood pressure, antihypertensive therapy, and outcome in ischemic stroke treated with intravenous thrombolysis. Retrospective analysis from Safe Implementation of Thrombolysis in Stroke-International Stroke Thrombolysis Register (SITS-ISTR). *Stroke*, 40: 2442–49.
- Ahnstedt, H., McCullough, L.D. 2019. The impact of sex and age on T cell immunity and ischemic stroke outcome. *Cell Immunol*345: 103960
- Akpinar, C.K., Gurkas, E., Aytac, E. 2018. Moderate to severe anemia is associated with poor functional outcome in acute stroke patients treated with mechanical thrombectomy. *Interventional Neurology*, 7:12-18.
- Altman, K.W., Yu, G.P., Scaeffler, S.D. 2010. Consequence of dysphagia in hospitalized patients: Impact on prognosis and hospital resources. *Arch Otolaryngol Head Neck Surg*, 36:784-9.
- Arnorld, M., Liesirova, K., Morvay, A.B., Meisterernst, J., Schlager, M., Mono, M.L., Koussy, M.L., Kagi, G., Jung.S., Sarikaya, H. 2016. Dysphagia in acute stroke: incidence, burden and impact on clinical outcome. *PLoS One*, 11(2):e0148424
- Avan, A., Digaleh, H., Napoli, M.D., Stranges, S., Behrouz, R., Shojaeianbabei, G., Amiri, A., Tabrizi, R., Mokhber, N., Spence, D. 2019. Socioeconomic status and stroke incidence, prevalence, mortality, and worldwide burden: An ecological analysis from the Global Burden of Disease Study 2017. *BMC Medicine*, 17:191.
- Bager, J.E., Hjalmarsson, C., Manhem, K., Andersson, B. 2018. Acute blood pressure levels and long term outcome in ischaemic stroke. *Brain and Behavior*, 8 (6): e00992.
- Bahia, M.M., Mourao, L.F., Chun, R.Y. 2016. Dysarthria as a predictor of dysphagia following stroke. *NeuroRehabilitation*, 8(2):155-62.
- Bamford, J., Sandercock, P., Dennis, M., Burn, J., Warlow, C. 1991. Classification and natural history of clinically identifiable subtypes of cerebral infarction. *Lancet*, 337: 1521-6.

- Banks, J.L., Marrota, C.A. 2007. Outcomes validity and reliability of the modified rankin scale: Implications for stroke clinical trials a literature review and synthesis. *AHA Journal*, 38(3): 1091-1096.
- Bejot, Y., Bailly, H., Durier, J., Giroud M. 2016. Epidemiology of stroke in Europe and trends for the 21st century. *Press Med* (45): 391–398.
- Bernhardt, J., Haymardl, K., Kwakkel, G., Ward, N., Wolf, S.L., Borschmann, K., Krakauer, J.W., Boyd, L.A., Carmichael, S.T., Corbett, D., Cramer, S.C. 2017. Agreed definitions and a shared vision for new standards in stroke recovery research: The stroke recovery and rehabilitation roundtable taskforce. *International Journal of Stroke*, 12(5) 444–450.
- Bogason, E., Morrison, K., Zalatimo, O., Ermak, D.M., Lehman, E., Markey, E., Cockcroft. 2017. Urinary Tract Infections in Hospitalized Ischemic Stroke Patients: Source and Impact on Outcome. *Cureus*, 9(2):e1014.
- Budni, J., Bellettini-santos, T., Mina, F., Garcez, M.L., Zugno, A.I. 2016. The involvement of BDNF, NGT and GDNF in aging and Alzheimer’s disease. *Aging and disease*, 6(5): 331-341.
- Burkot, J., Kopec, G., Pera, J., Slowik, A., Dziedzic, T. 2015. Decompensated heart failure is a strong independent predictor of functional outcome after ischemic stroke. *Journal of Cardiac Failure*, 21(8).
- Deb, P., Sharma, S., Hassan, K.M. 2010. Pathophysiologic mechanisms of acute ischemic stroke: An overview with emphasis on therapeutic significance beyond thrombolysis. *Pathophysiology*, (17); 197–218.
- Dharmawan, A., Pinzon, R.T. 2018. The impact of onset to hospital admission time on clinical outcome in patients with ischemic stroke without reperfusion therapy. *Cent Asian J Med Sci*, 4(4):300-305.
- Dickson, S., Barbour, R.S., Brady, M., Clarck, M., Paton, G. 2008. Patients experience’s of disruptions associated with post stroke dysarthria. *Int J Lang Commun Disord*, 43(2):135-53.
- Dimyan, M.A., Cohen, L.G. 2011. Neuroplasticity in the context of motor rehabilitation after stroke. *Nat Rev Neurol*, (7): 76-85.
- Dromerick, A.W., Reding, M.J. 1995. Functional outcome for patients with hemiparesis, hemihypesthesia, and hemianopsia. Does lesion location matter?. *American Heart Association*, (26):11.

- Ersoz, M., Tunc, H., Akyuz, M., Ozel, S. 2005. Bladder storage and emptying disorders frequencies in hemorrhagic and ischaemic stroke patients with bladder dysfunction. *Cerebrovasc Disc*, 20, 395-399.
- Feigin, V.L., Forouzanfar, M.H., Krishnamurthi, R., Mensah, G.A., Connor, M., Bennett, D.A. 2014. Global and region burden of stroke during 1990-2010: Findings from the global burden of disease study 2010. *Lancet*, 383(99):245-54.
- Frost, S.B., Barbay, S., Friel, K.M., Plautz, E.J., Nudo, R.J. 2003. Reorganization of remote cortical regions after ischemic brain injury: A potential substrate for stroke recovery. *J Neurophysiol* 89, 3205- 3214.
- Furlan, J.C., Vergouwen, M.D., Fang, J., Silver, F.L. 2014. White blood cell count is an independent predictor of outcomes after acute ischaemic stroke. *Eur J Neurol*, 21(2):215-22.
- Ganesh, A., Fernandez, R.L., Wharton, R.M., Gutnikov, S.A., Silver, L.F., Mehta, Z., Rothwell, P.M. 2017. Time course of evolution of disability and cause specific mortality after ischemic stroke: Implications for trial design. *Journal of the American Heart Association*, 6:e005788.
- Grube, M.M., Koennecke, H.C., Walter, G., Meisel, A., Sobesky, J., Nolte, C.H., Wellwood, L., Heuschmann, P.U. 2013. Influence of acute complications on outcome 3 months after Ischemic stroke. *PLoS ONE* 8(9).
- Hara, Y. 2015. Brain plasticity and rehabilitation in stroke patients. *J Nippon Med Sch* 82, 4-13.
- Harrison, J., McArthur, K., Quinn, T. 2013. Assessment scales in stroke: clinimetric and clinical considerations. *Clinical Interventions in Aging*, (8): 201–211.
- Hankey, G. 2006. Potential new risk factors for ischemic stroke: What is their potential?. *AHA Journal*, 37:2181-2188.
- Hidayat, A., Arief, M., Wijaya, A., As'ad, S. 2016. Vascular endothelial growth factor and brain derived neurotrophic factor levels in ischaemic stroke subject. *Indones Biomed J* (8), 115-118.
- Hinduja, A., Limaye, K., Patel, A., Mahumala, Z. 2014. Impact stroke location on stroke outcome. *American stroke academy*, 82:10.
- Ishitsuka, K., Kamouchi, M., Hatta, J., Fukuda, K., Matsuo, R., Kuroda, J., Ago, T., Kuwashiro, T., Sugimori, H., Nakane, H., Kitazono, T. 2014. High blood

pressure after acute ischemic stroke is associated with poor clinical outcome: Fukuoka stroke registry. *Hypertension* 63, 54-60.

Johnson, B.H., Bonafedel, M.M., Watson, C. 2016. Short and longer term healthcare resource utilization and costs associated with acute ischemic stroke. *Clinico Economics and Outcomes Research*, 8:53–61.

Joundi, R.A., Martino, R., Saposnik, G., Giannakeas, V., Fang, J., Kapral, M.K. 2017. Predictors and outcomes of dysphagia screening after acute ischemic stroke. *Stroke*, 48: 900-906.

Kaarisalo, M.M., Raiha, I., Sivenius, J., Raiha, P.I., Lehtonen, A., Mahonen, M., Tuomilehto, J., Salomaa. 2005. Diabetes worsens the outcome of acute ischemic stroke. *Diabetes Res Clin Pract*, 69(3): 293-298.

Kadojić, D., Bijelić, B.R., Radanović, R., Porobić, M., Rimac, J., Dikanović, M. 2012. Aphasia in patients with ischemic stroke. *Acta Clin Croat*, 51(2):221-5.

Katan, M., Luft, A. 2018. Global burden of stroke. *Semin Neurol*, 38:208–211.

Kellert, L., Martin, E., Sykora, M., Bauer, H., Gussmann, P., Diedler, J., Herweh, C., Ringleb, P.A., Hacke, W., Steiner, T., Bosel, J. 2011. Cerebral oxygen transport failure? Decreasing hemoglobin and hematocrit levels after ischemic stroke predict poor outcome and mortality. *STroke: RelevAnt Impact of hemoglobin, Hematocrit and Transfusion (STRAIGHT)-an Observational Study. Journal of stroke*, 42: 2832-2837.

Kementerian Kesehatan RI. 2018. Riset Kesehatan Dasar Riskesdas. Kementerian Kesehatan RI, Jakarta.

Knoflach, M., Matosevic, B., Rucker, M., Furtner, M., Mair, A., Wille, G., Zangerle, A., Werner, P., Ferrari, J., Schmidauer, C., Seyfang, L., Kiech, S., Willeit, J. 2012. Functional recovery after ischaemic stroke- A matter of age: Data from the Australia stroke unit registry. *Neurology* 78, 279-285.

Leonardi, B.J., Bath, P.M.W., Phillips, S.J., Sandercock, P.A.G. 2002. Blood pressure and clinical outcomes in the international stroke trial. *Stroke*, 33: 1315–20.

Li, J., Wang, D., Tao, W., Dong, W., Zhang, J., Yang, J., Liu, M. 2016. Early consciousness disorder in acute ischemic stroke: incidence, risk factors and outcome. *BMC Neurology*, 16:140.

- Liang, J., Gu, X., Liu, W., Sun, J., Ma, Q., Tong, W. 2016. Relationship between leukocyte and neutrophil counts and early prognosis after acute ischemic stroke. *Int J Clin Exp Med*, 9(2):4308-15.
- Liferidge, A. 2010. Cortical versus subcortical strokes. United State: UMEM Educational Pearls [cited 2021 January 27]. Available from: [https://em.umaryland.edu/educational\\_pearls/970/](https://em.umaryland.edu/educational_pearls/970/)
- Liu, X., Luo, Y., Liu, Y., Li, X., Yan, Z., Zhao, J. 2020. Derivation and validation of novel and parsimonious prognosis prediction score for ischaemic stroke patients: The S2AFI Score. Research Square.
- Mattei, T.A., Teasdale, G.M. 2020. The story of the development and adoption of the glasgow coma scale: Part I, the early years. *World Neurosurgery*, 134:311-322.
- Martin, S., Albright, K.C., Tanksley, J., Pandav, V. 2011. Zero on the NIHSS does not equal the absence of stroke. *YMEM* 57, 42-45.
- Martino, R., Foley, N., Bhogal, S., Diamant, N., Speechley, M., Teasell, R. 2005. Dysphagia after stroke: Incidence, diagnosis, and pulmonary complications. *Stroke* 36(12):2756-63.
- Meschia, J.F., Bushnell, C., Albalá, B.B., Braun, L.T., Bravata, D.M., Chaturvedi, S., Creager, M.A., Eckel, R.H., Elkind, M.S.V., Fornage, M., Goldstein, L.B., Greenberg, S.M., Horvath, S.E., Ladekola, C., Jauch, E.C., Moore, W.S., Wilson, J.A. 2014. Guidelines for the primary prevention of stroke: A statement for healthcare professionals from the American Heart Association/American Stroke Association. *Stroke AHA Journal*, 45:3754-3832.
- Miller, E. L., Murray, L., Richard, L., Zorowitz, R.D., Bakas, T., Clark, P., Billinger, S.A. 2010. Comprehensive overview of nursing and interdisciplinary rehabilitation care of the stroke patient: A scientific statement from the American Heart Association. *Stroke AHA Journal*, 41:2402-2448.
- Mills, K.T., Bundy, J.D., Kelly, T.N., Reed, J.E., Kearney, P.M., Reynolds, K., Chen, J., He, J. 2016. Global disparities of hypertension prevalence and control: A systematic analysis of population-based studies from 90 countries. *Circulation*, 134(6); 441-450.
- Mittmann, N., Seung, S.J., Hill, M.D., Phillips, S.J., Hachinski, V., Cote, R., Buck, B.H., Mackey, A., Gladstone, D.J., Howse, D.C., Shuaib, A., Sharma, M. 2012. Impact of disability status on ischemic stroke costs in Canada in the first year. *Can J Neurol Sci*, 39: 793-800.

- Nijland, R.H., Van, W.E.E., Harmeling, W.B.C., Kwakkel, G. 2010. Presence of finger extension and shoulder abduction within 72 hours after stroke predicts functional recovery: early prediction of functional outcome after stroke: the EPOS cohort study. *Stroke*,41(4):745-750.
- Nieboer, D., Ploeg, T.V.D., Steyerberg, E.W. 2016. Assessing discriminative performance at external validation of clinical prediction models. *PLoS ONE*, 11(2): e0148820.
- Ntaios,G., Faouzi,M., Ferrari, J., Lang, W., Vemmos, K., Michel, P. 2012. An interger-based score to predict functional outcome in acute ischemic stroke: the ASTRAL score. *Neurology*, 78: 1916-1922.
- Nugroho, A.W., Arima, H., Takashima, N., Fujii, T., Shitara, S., Miyamatsu, N., Sugimoto, Y., Nagata, S., Komori, M., Kita, Y., Miura, K., Nozaki, K. 2018. The JAGUAR score predicts 1 month disability/death in ischemic stroke patient ineligible for recanalization therapy. *Journal of Stroke and Cerebrovascular Disease*, 27(10): 2579-2586.
- O'Donnell, M.J., Fang, J., D'Uva, C., Saposnik, G., Gould, L., McGrath, E., Kapral, M.K. 2012. The PLAN Score a bedside prediction rule for death and severe disability following acute ischemic stroke. *Arch Intern Medicine*, 172 (20).
- Okubo, P.C., Fabio, S.R., Domenis, D.R., Takanayagui, O.M. 2012. Using the national institute of health stroke scale to predict dysphagia in acute ischemic stroke. *Cerebrovasc*, 33(6):501-7.
- Oliveira, F.F., Damasceno, B.P. 2011. Global aphasia as a predictor of mortality in the acute phase of first stroke. *Arq Neuropsiquiatr*, 69:277-282.
- Paciaroni, M., Agnelli, G., Corea, F., Ageno, W., Alberti, A., Lanari, A, 2008. Early hemorrhagic transformation of brain infarct: Rate, predictive factor, and influence of clinical outcome: results from a prospective multicenter study. *Stroke AHA Journal*, 39(8):2249-63.
- Paciaroni, M., Mazzota, G., Corea, F., Caso, V., Venti, M., Milia, P. 2004. Dysphagia following stroke. *Eur Neurol*, 51: 162-7.
- Padma, R.G., Pinzon, R.T., Pramudita, E.A. 2017. Kejadian disfagia saat masuk rumah sakit sebagai faktor prognosis buruk luaran klinis pasien stroke iskemik. *Cermin Dunia Kedokteran*, 44 (1).

- Pan, S.L., Lien, N.L., Chen, T.H.H. 2010. Is higher serum total cholesterol level associated with better long-term functional outcomes after noncardioembolic ischemic stroke?. *Arch Phys Med Rehabil*,91.
- Petrea, R.E., Beiser, A.S., Seshadri, S., Hayes, M.K., Kase, C.S., Wolf, P.A. 2009. Stroke in women gender differences in stroke incidence and post stroke disability in the Framingham Heart Study. *Stroke AHA Journal*, 40(4): 1032–1037.
- Phan, T.G., Clissold, B.B., Ma, H., Ly, J.V., Srikanth, V. 2016. Predicting disability after ischemic stroke based on comorbidity index and stroke severity-from the virtual international stroke trials archive acute collaboration. *Frontiers in Neurology*, 8:192.
- Pinzon, R.T., Adnyana, K.S.G., Sanyasi, R.D.L.R. 2016. Profil epidemiologi stroke: Gambaran tentang pola demografi, faktor risiko, gejala klinik, dan luaran klinis pasien stroke. *Bertha Grafika*, Yogyakarta.
- Poisson, S.N., Johnston, S.C., Josephson, S.A. 2010. Urinary tract infections complicating stroke: mechanism, consequences and possible solutions. *Stroke*, 41, 180-184.
- Pu, Y., Liu, L., Wang, Y., Zou, X., Pan, Y., Soo, Y., Leung, T., Zhao, X., Wong, K.S., Wang, Y. 2013. Geographic and sex difference in the distribution of intracranial atherosclerosis in China. *Stroke AHA Journal*, 44:2109-14.
- Quan, K., Wang, A., Zhang, X., Wang, Y. 2019. Leukocyte count and adverse clinical outcomes in acute ischemic stroke patients. *Frontiers in Neurology*, 10:1240.
- Rachmawati, T., Nugraheni, W.P., Rosita, T., Nuraini, S., Ariningrum, R., Rustika., Aryastami., Wahidin, M., Puspasari, H.W., Ardani, I., Agustiya, R.I., Pawitaningtyas, I., Nurlaela, N., Kusnali, A., Lusiana, M., Karlina, Samosir, J.V., Retno, W. 2018. Analisis beban penyakit nasional dan sub nasional Indonesia 2017. Kementerian Kesehatan RI.
- Rahayu, U. B., Wibowo, S., & Setyopranoto, I. (2017). Development of motor learning implementation for ischemic stroke: finding expert consensus. *Journal of Thee Medical Sciences (Berkala Ilmu Kedokteran)*, 49(04), 200–216.
- Rahayu, U. B., Wibowo, S., & Setyopranoto, I. (2019). Neurorestoration: Programme management for post-ischemic stroke patients. *International Journal of Healthcare Management*, 0(0), 1–8.

- Royston, P., Moons, K.G.M. 2009. Research methods & reporting prognosis and prognostic research: Developing a prognostic model. *BMJ*;338:b604.
- Sajobi, T.T., Menon, B.K., Wang, M., Lawal, O., Shuaib, A., Williams, D., Poppe, A.Y., Jovin, T.G., Casaubon, L.K., Devlin, T., Dowlathshahi, D., Fanale, C., Lowerison, M.W., Demchuk, A.M., Goyal, M., Hill, M.D. 2017. Early trajectory of stroke severity predicts long term functional outcome in ischaemic stroke subjects. *Stroke* 1-7.
- Sanchez-Mendoza, E.H., Hermann, D.M., 2016. Correlates of Post-Stroke Brain Plasticity, Relationship to Pathophysiological Settings and Implications for Human Proof-of-Concept Studies. *Front. Cell. Neurosci.* 10, 1–7.
- Sanyasi, R.D.L.R., Pinzon, R.T. 2017. Complications as important predictors of disability in ischemic stroke. *Univ Med*;36:197-204.
- Saposnik, G., Kapral, M.K., Liu, Y., Hall, R., O'Donnell, M., Raptis, S., Tu, J.V., Mamdani, M., Austin, P.C. 2011. IScore a risk score to predict death early after hospitalization for an acute ischemic stroke. *Circulation*, 123:739-749.
- Sharma, K., Johnson, D.J., Johnson, B., Frank, S.M., Stevens, R.D. 2018. Hemoglobin concentration does not impact 3 month outcome following acute ischemic stroke. *BMC Neurology*, 18:78.
- Shobha, N., Sylaja, P.N., Kapral, M.K., Fang, J., Hill, M.D., 2010. Differences in stroke outcome based on sex. *Neurology* 74, 767–771.
- Silakarma, D., & Sudewi, A. A. R. (2019). The role of brain-derived neurotrophic factor (BDNF) in cognitive functions. *Bali Medical Journal*, 8(2), 518.
- Snarska, K.K., Gajewska, H.B., Topczewska, K.K., Drozdowski, W., Chorazy, M., Kulakowska, A., Malyyszko, J. 2017. Hyperglycemia and diabetes have different impacts on outcome of ischemic and hemorrhagic stroke. *Arch Med Sci*, 13 (1): 100–108.
- Sopiyudin, M.D. 2011. Penelitian prognostik dan sistem skoring disertai praktik dengan SPSS dan STATA. Edisi 8. Alqa Prisma Interdelta, Bandung.
- Sopiyudin, M.D. 2009. Penelitian diagnostik dasar dasar teoretis dan aplikasi dengan program SPSS dan STATA. Edisi 5. Salemba Medika, Jakarta.
- Srinivas, K., Krishnamurthy, H.A. 2017. Prognostic significance of total leucocytes count in acute ischemic stroke. *Int J Contemp Med Res*, 4(4):833-36.

- Stead, L.G., Enduri, S., Bellolio, F., Jain, A.R., Vaidyanathan, L., Gilmore, R., Kashyap, R., Weaver, A.L., Brown, R.D. 2012. The impact of blood pressure hemodynamics in acute ischemic stroke: a prospective cohort study. *Int J Emerg Med*, 5: 3.
- Steyerberg, E., Moons, K.G.M., Van der Windt, D., Hayden, J., Perel, P., Schroter, S., Riley, R.D., Hemingway, H., Altman, G.G. 2013. Prognosis research strategy (PROGRESS) series 3: prognostic model research. *PLoS Medicine*, 10 (2): e1001381.
- Steyerberg, E. 2009. *Clinical prediction models: A Practical approach to development, validation, and updating*. Springer Science, USA.
- Stott,D.J., Falconer, H., Tilston, J., Langhorne, P. 2009. Urinary Tract Infection After Stroke. *International Journal of Medicine*, 102 (4): 243-249.
- Sung, S.F., Chen, Y.W., Hung, L.C., Lin, H.J. 2014. Revised iScore to predict outcomes after acute ischemic stroke. *Journal of Stroke and Cerebrovascular Diseases*, 23 (6):1634-1639.
- Tanne, D., Molshatzki, N., Merzeliak, O., Tsabari, R., Toashi, M., Schwammenthal, Y. 2010. Anemia status, hemoglobin concentration and outcome after acute stroke: a cohort study. *BMC Neurology*, 10:22.
- Thrift., Amanda,G., Srikanth., Velandai, K. 2010. *Brocklehurst's textbook of geriatric medicine and gerontology*. Saunders. USA. 61. p478-483.
- Tiksnadi, A., Ahmad, S.A., Prawiroharjo, P. 2017. Prinsip dasar neurorestorasi pascacedera saraf. *In: Buku Ajar Neurologi Departemen Neurologi Fakultas Kedokteran Universitas Indonesia, Penerbit Kedokteran Indonesia, Jakarta*.
- Tziomalos, K., Spanou, M., Bouziana, S., Papadopoulou, M., Giampatzis, V., Kostaki, S., Dourliou, V., Tsopozidi, M., Savopoulos, C., Hattzitoliou, A. 2014. Type 2 diabetes is associated with a worse functional outcome of ischemic stroke. *World J Diabetes*, 5(6): 939-944.
- Venketasurbramanian, N., Yoon, B.W., Pandian, J., Navarrod,J.C. 2017. Stroke epidemiology in south, east, and south-east asia: A Review. *Journal of Stroke*, 19(3):286-294.
- Virani, S.S., Alonso, A., Benjamin, E. J., Bittencourt, M.S., Callaway, C.W., Carson, A.P., Chamberlain, A.M., Chang, A.R., Cheng, S., Delling, F.N., Djousse,L, Elkind, M.S.V. 2020. AHA statistical update-heart disease and stroke statistics

2020 update: A Report from the American Heart Association. *Circulation*,141:139–596.

- Vogenberg, F.R. 2009. Predictive and prognostic models: implications for healthcare decision making in a modern recession. *Journal of American Health & Drug Benefits*, 2:218.
- Walow, C.P., Dennis, M.S., Gijn, V.J., Hankey, G.J., Sandercock, P.A, Bamford, J.M. 2007. *Stroke In a practical guide to management*. 1st ed. London. Blackwell Science.
- Wang, W., Sang, W., Jin, D., Yan, S., Hong, Y., Zhang, H., Yang, X. 2017. The prognostic value of the iScore, the PLAN score, and the ASTRAL score in acute ischemic stroke. *Journal of Stroke and Cerebrovascular Disease*, 26(6):1233-1238.
- Ward, N.S., Cohen, L.G. 2012. Mechanisms underlying recovery of motor function after stroke 61, 1844-1848.
- Westerndrop, W.F., Nederkoom, P.J., Vermeij, Jan-Dirk., Dijkgraaf, M.G., Beek. 2011. Post stroke infection: A systematic review and meta-analysis. *BMC Neurol*, (11):110.
- Winn, H., Richard., M.D. 2017. *Youmans and Winn Neurological Surgery*. In: Burrows, A.M., Brown, D.A., Klaas, J.P., Khurana, V.G., Benarroch, E.E., Meyer, F.B. 7th, Elsevier, Philadelphia.
- Wirawan, R.P. 2009. Rehabilitasi stroke pada pelayanan kesehatan primer. *Majalah Kedokteran Indonesia* ,59(2):61-71.
- Wouters, A., Nysten, C., Thijs, V., Lemmens, R. 2018. Prediction of outcome in patients with acute ischemic stroke based on initial severity and improvement in the First 24 h. *Frontiers in Neurology*, (9):308.
- Wu, L., Wang,A., Wang, X., Zhao, X., Wang, C., Liu, L., Zheng,H., Wang, Y., Cao, Y., Wang, Y. 2015. Factors for short-term outcomes in patients with a minor stroke: results from China National Stroke Registry. *BMC Neurology*, 15:253.
- Yang, Y., Shi, Y.Z., Zhang, N., Wang, S., Ungvari, G.S., Ng, C.H., Wang, Y.L., Zhao, X.Q., Wang, Y.W., Wang, C.X., Xiang, Y.T. 2016. The disability rate of 5-Year post-stroke and its correlation factors: A National Survey in China. *PLoS ONE*,11(11).

- Ye, L., Cai, R., Yang, M., Qian, J., Hong, Z. 2015. Reduction of the systemic inflammatory induced by acute cerebral infarction through ultra-early thrombolytic therapy. *Exp Ther Med*, 10(4):1493–8.
- Yeoh, Y.S., Koh, G.C.H., Tan, C.S., Tu, T.M., Singh, R., Chang, H.M., Silva, D.A., Ng, Y.S., Ang, Y.H., Yap, P., Chew, E., Merchant, R.A., Yeo, T.T., Chou, N., Venkatasubramanian, N., Lee, K.E., Young, S.H., Hoenig, H., Matchar, B. 2019. Health-related quality of life loss associated with first-time stroke. *PLoS ONE*, 14(1).
- Yu, C., An, Z., Zhao, W., Wang, W., Gao, C., Liu, S., Wang, J., Wu, J. 2015. Sex difference in stroke subtypes, severity, risk factors, and outcomes among elderly patients with acute ischemic stroke. *Front Aging Neurosci*, 7:174.
- Zhao, W., An, Z., Hong, Y., Zhou, G., Guo, J., Zhang, Y., Yang, Y. 2016. Low total cholesterol level is the independent predictor of poor outcomes in patients with acute ischemic stroke: a hospital-based prospective study. *BMC Neurology*, 16:36.
- Zorowitz, R.D., Chen, E., Bianchini, K., Laouri, M. 2009. Cost and rehabilitation use of stroke survivors: A retrospective study of medicare beneficiaries. *Top Stroke Rehabilitation*, 16(5):309-320.