

## BIBLIOGRAPHY

- Aliyya, S.N., 2018. The Difference in Functional Outcome Measured By Barthel Index of Ischemic Stroke Patient with Diabetes Melitus and Without Diabetes Melitus Risk Factor in RSUP DR. Sardjito, Yogyakarta. Universitas Gadjah Mada.
- American Diabetes Association, 2014. Diagnosis and Classification of Diabetes Mellitus. *Diabetes Care* 37, S81–S90.
- Badan Pusat Statistik, 2018. Indikator Kesejahteraan Rakyat 2018.
- Béjot, Y., Bailly, H., Durier, J., Giroud, M., 2016. Epidemiology of stroke in Europe and trends for the 21st century. *Presse Med.* 45, e391–e398.
- Bhaskar, S., Stanwell, P., Bivard, A., Spratt, N., Walker, R., Kitsos, G., Parsons, M., Evans, M., Jordan, L., Nilsson, M., Attia, J., Levi, C., 2017. The influence of initial stroke severity on mortality, overall functional outcome and in-hospital placement at 90 days following acute ischemic stroke: A tertiary hospital stroke register study. *Neurol. India* 65, 1252.
- Bindawas, S.M., Vennu, V., Mawajdeh, H., Alhaidary, H., 2017. Functional outcomes by age after inpatient stroke rehabilitation in Saudi Arabia. *Clin. Interv. Aging* Volume 12, 1791–1797.
- Boehme, A.K., Esenwa, C., Elkind, M.S.V., 2017. Stroke Risk Factors, Genetics, and Prevention. *Circ. Res.*
- Bustamante, A., García-Berrocso, T., Rodriguez, N., Llombart, V., Ribó, M., Molina, C., Montaner, J., 2016. Ischemic stroke outcome: A review of the influence of post-stroke complications within the different scenarios of stroke care. *Eur. J. Intern. Med.* 29, 9–21.
- Chandra, R. V., Leslie-Mazwi, T.M., Oh, D.C., Chaudhry, Z.A., Mehta, B.P., Rost, N.S., Rabinov, J.D., Hirsch, J.A., González, R.G., Schwamm, L.H., Yoo, A.J., 2012. Elderly Patients Are at Higher Risk for Poor Outcomes After Intra-Arterial Therapy. *Stroke* 43, 2356–2361.
- Chen, C.-L., Tang, F.-T., Chen, H.-C., Chung, C.-Y., Wong, M.-K., 2000. Brain lesion size and location: Effects on motor recovery and functional outcome in stroke patients. *Arch. Phys. Med. Rehabil.* 81, 447–452.
- Chen, R., Ovbiagele, B., Feng, W., 2016. Diabetes and Stroke: Epidemiology, Pathophysiology, Pharmaceuticals and Outcomes. *Am. J. Med. Sci.* 351, 380–386.
- Cheng, B., Forkert, N.D., Zavaglia, M., Hilgetag, C.C., Golsari, A., Siemonsen, S., Fiehler, J., Pedraza, S., Puig, J., Cho, T.-H., Alawneh, J., Baron, J.-C., Ostergaard,

- L., Gerloff, C., Thomalla, G., 2014. Influence of Stroke Infarct Location on Functional Outcome Measured by the Modified Rankin Scale. *Stroke* 45, 1695–1702.
- Chun, H.-Y.Y., Whiteley, W.N., Dennis, M.S., Mead, G.E., Carson, A.J., 2018. Anxiety After Stroke. *Stroke* 49, 556–564.
- Dehkharghani, S., Andre, J., 2017. Imaging Approaches to Stroke and Neurovascular Disease. *Neurosurgery* 80, 681–700.
- Doehner, W., Schenkel, J., Anker, S.D., Springer, J., Audebert, H.J., 2013. Overweight and obesity are associated with improved survival, functional outcome, and stroke recurrence after acute stroke or transient ischaemic attack: observations from the TEMPiS trial. *Eur. Heart J.* 34, 268–277.
- Douglas, V., Shamy, M., Bhattacharya, P., 2015. Should CT Angiography be a Routine Component of Acute Stroke Imaging? *The Neurohospitalist* 5, 97–98.
- Dromerick, A.W., Edwards, D.F., Diring, M.N., 2003. Sensitivity to changes in disability after stroke: A comparison of four scales useful in clinical trials. *J. Rehabil. Res. Dev.* 40, 1.
- Feigin, V.L., Forouzanfar, M.H., Krishnamurthi, R., Mensah, G.A., Connor, M., Bennett, D.A., Moran, A.E., Sacco, R.L., Anderson, L., Truelsen, T., O'Donnell, M., Venketasubramanian, N., Barker-Collo, S., Lawes, C.M.M., Wang, W., Shinohara, Y., Witt, E., Ezzati, M., Naghavi, M., Murray, C., 2014. Global and regional burden of stroke during 1990–2010: findings from the Global Burden of Disease Study 2010. *Lancet* 383, 245–255.
- Feigin, V.L., Norrving, B., Mensah, G.A., 2017. Global Burden of Stroke. *Circ. Res.* 120, 439–448.
- Freundlieb, N., Philipp, S., Drabik, A., Gerloff, C., Forkert, N.D., Hummel, F.C., 2015. Ipsilesional motor area size correlates with functional recovery after stroke: A 6-month follow-up longitudinal TMS motor mapping study. *Restor. Neurol. Neurosci.* 33, 221–231.
- Ganesh, A., Luengo-Fernandez, R., Wharton, R.M., Rothwell, P.M., 2018. Ordinal vs dichotomous analyses of modified Rankin Scale, 5-year outcome, and cost of stroke. *Neurology* 91, e1951–e1960.
- Gofir, A., Mulyono, B., Sutarni, S., 2017. Hyperglycemia as a prognosis predictor of length of stay and functional outcomes in patients with acute ischemic stroke. *Int. J. Neurosci.* 127, 923–929.
- Grotta, J.C., Albers, G.W., Broderick, J.P., Kasner, S.E., Lo, E.H., Mendelow, A.D., Sacco, R.L., Wong, L.K.S., 2015. Stroke: Pathophysiology, Diagnosis, and Management, *Stroke: Pathophysiology, Diagnosis, and Management*.

- Gupta, S., Yadav, R., Malhotra, A., 2016. Assessment of physical disability using Barthel index among elderly of rural areas of district Jhansi (U.P), India. *J. Fam. Med. Prim. Care* 5, 853.
- Haast, R.A., Gustafson, D.R., Kiliaan, A.J., 2012. Sex Differences in Stroke. *J. Cereb. Blood Flow Metab.* 32, 2100–2107.
- Hajar, R., 2017. Risk factors for coronary artery disease: Historical perspectives. *Hear. Views* 18, 109.
- Herman, W.H., Ye, W., Griffin, S.J., Simmons, R.K., Davies, M.J., Khunti, K., Rutten, G.E.H.M., Sandbaek, A., Lauritzen, T., Borch-Johnsen, K., Brown, M.B., Wareham, N.J., 2015. Early Detection and Treatment of Type 2 Diabetes Reduce Cardiovascular Morbidity and Mortality: A Simulation of the Results of the Anglo-Danish-Dutch Study of Intensive Treatment in People With Screen-Detected Diabetes in Primary Care (ADDITION-Europe). *Diabetes Care* 38, 1449–1455.
- Ishitsuka, K., Kamouchi, M., Hata, 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 Outcomes. *Hypertension* 63, 54–60.
- James, S.L., Abate, D., Abate, K.H., Abay, S.M., Abbafati, C., Abbasi, N., Abbastabar, H., Abd-Allah, F., Abdela, J., Abdelalim, A., Abdollahpour, I., Abdulkader, R.S., Abebe, Z., Abera, S.F., Abil, O.Z., Abraha, H.N., Abu-Raddad, L.J., Abu-Rmeileh, N.M.E., Accrombessi, M.M.K., Acharya, D., Acharya, P., Ackerman, I.N., Adamu, A.A., Adebayo, O.M., Adekanmbi, V., Adetokunboh, O.O., Adib, M.G., Adsuar, J.C., Afanvi, K.A., Afarideh, M., Afshin, A., Agarwal, G., Agesa, K.M., Aggarwal, R., Aghayan, S.A., Agrawal, S., Ahmadi, A., Ahmadi, M., Ahmadieh, H., Ahmed, M.B., Aichour, A.N., Aichour, I., Aichour, M.T.E., Akinyemiju, T., Akseer, N., Al-Aly, Z., Al-Eyadhy, A., Al-Mekhlafi, H.M., Al-Raddadi, R.M., Alahdab, F., Alam, K., Alam, T., Alashi, A., Alavian, S.M., Alene, K.A., Alijanzadeh, M., Alizadeh-Navaei, R., Aljunid, S.M., Alkerwi, A., Alla, F., Allebeck, P., Alouani, M.M.L., Altirkawi, K., Alvis-Guzman, N., Amare, A.T., Aminde, L.N., Ammar, W., Amoako, Y.A., Anber, N.H., Andrei, C.L., Androudi, S., Animut, M.D., Anjomshoa, M., Ansha, M.G., Antonio, C.A.T., Anwari, P., Arabloo, J., Arauz, A., Aremu, O., Ariani, F., Armoon, B., Ärnlov, J., Arora, A., Artaman, A., Aryal, K.K., Asayesh, H., Asghar, R.J., Ataro, Z., Atre, S.R., Ausloos, M., Avila-Burgos, L., Avokpaho, E.F.G.A., Awasthi, A., Ayala Quintanilla, B.P., Ayer, R., Azzopardi, P.S., Babazadeh, A., Badali, H., Badawi, A., Bali, A.G., Ballesteros, K.E., Ballew, S.H., Banach, M., Banoub, J.A.M., Banstola, A., Barac, A., Barboza, M.A., Barker-Collo, S.L., Barnighausen, T.W., Barrero, L.H., Baune, B.T., Bazargan-Hejazi, S., Bedi, N., Beghi, E., Behzadifar, Masoud, Behzadifar, Meysam, Béjot, Y., Belachew, A.B., Belay, Y.A., Bell, M.L., Bello, A.K., Bensenor, I.M., Bernabe, E., Bernstein, R.S., Beuran, M., Beyranvand, T., Bhala, N.,

Bhattacharai, S., Bhaumik, S., Bhutta, Z.A., Biadgo, B., Bijani, A., Bikbov, B., Bilano, V., Bililign, N., Bin Sayeed, M.S., Bisanzio, D., Blacker, B.F., Blyth, F.M., Bou-Orm, I.R., Boufous, S., Bourne, R., Brady, O.J., Brainin, M., Brant, L.C., Brazinova, A., Breitborde, N.J.K., Brenner, H., Briant, P.S., Briggs, A.M., Briko, A.N., Britton, G., Brugha, T., Buchbinder, R., Busse, R., Butt, Z.A., Cahuana-Hurtado, L., Cano, J., Cárdenas, R., Carrero, J.J., Carter, A., Carvalho, F., Castañeda-Orjuela, C.A., Castillo Rivas, J., Castro, F., Catalá-López, F., Cercy, K.M., Cerin, E., Chaiah, Y., Chang, A.R., Chang, H.-Y., Chang, J.-C., Charlson, F.J., Chattopadhyay, A., Chattu, V.K., Chaturvedi, P., Chiang, P.P.-C., Chin, K.L., Chitheer, A., Choi, J.-Y.J., Chowdhury, R., Christensen, H., Christopher, D.J., Cicuttini, F.M., Ciobanu, L.G., Cirillo, M., Claro, R.M., Collado-Mateo, D., Cooper, C., Coresh, J., Cortesi, P.A., Cortinovis, M., Costa, M., Cousin, E., Criqui, M.H., Cromwell, E.A., Cross, M., Crump, J.A., Dadi, A.F., Dandona, L., Dandona, R., Dargan, P.I., Daryani, A., Das Gupta, Rajat, Das Neves, J., Dasa, T.T., Davey, G., Davis, A.C., Davitoiu, D.V., De Courten, B., De La Hoz, F.P., De Leo, D., De Neve, J.-W., Degefa, M.G., Degenhardt, L., Deiparine, S., Dellavalle, R.P., Demoz, G.T., Deribe, K., Derveniz, N., Des Jarlais, D.C., Dessie, G.A., Dey, S., Dharmaratne, S.D., Dinberu, M.T., Dirac, M.A., Djalalinia, S., Doan, L., Dokova, K., Doku, D.T., Dorsey, E.R., Doyle, K.E., Driscoll, T.R., Dubey, M., Dubljanin, E., Duken, E.E., Duncan, B.B., Duraes, A.R., Ebrahimi, H., Ebrahimpour, S., Echko, M.M., Edvardsson, D., Effiong, A., Ehrlich, J.R., El Bcheraoui, C., El Sayed Zaki, M., El-Khatib, Z., Elkout, H., Elyazar, I.R.F., Enayati, A., Endries, A.Y., Er, B., Erskine, H.E., Eshrati, B., Eskandarieh, S., Esteghamati, A., Esteghamati, S., Fakhim, H., Fallah Omrani, V., Faramarzi, M., Fareed, M., Farhadi, F., Farid, T.A., Farinha, C.S.E. sá, Farioli, A., Faro, A., Farvid, M.S., Farzadfar, F., Feigin, V.L., Fentahun, N., Fereshtehnejad, S.-M., Fernandes, E., Fernandes, J.C., Ferrari, A.J., Feyissa, G.T., Filip, I., Fischer, F., Fitzmaurice, C., Foigt, N.A., Foreman, K.J., Fox, J., Frank, T.D., Fukumoto, T., Fullman, N., Fürst, T., Furtado, J.M., Futran, N.D., Gall, S., Ganji, M., Gankpe, F.G., Garcia-Basteiro, A.L., Gardner, W.M., Gebre, A.K., Gebremedhin, A.T., Gebremichael, T.G., Gelano, T.F., Geleijnse, J.M., Genova-Maleras, R., Geramo, Y.C.D., Gething, P.W., Gezae, K.E., Ghadiri, K., Ghasemi Falavarjani, K., Ghasemi-Kasman, M., Ghimire, M., Ghosh, R., Ghoshal, A.G., Giampaoli, S., Gill, P.S., Gill, T.K., Ginawi, I.A., Giussani, G., Gnedovskaya, E. V., Goldberg, E.M., Goli, S., Gómez-Dantés, H., Gona, P.N., Gopalani, S.V., Gorman, T.M., Goulart, A.C., Goulart, B.N.G., Grada, A., Grams, M.E., Grosso, G., Gughani, H.C., Guo, Y., Gupta, P.C., Gupta, Rahul, Gupta, Rajeev, Gupta, T., Gyawali, B., Haagsma, J.A., Hachinski, V., Hafezi-Nejad, N., Haghparast Bidgoli, H., Hagos, T.B., Hailu, G.B., Haj-Mirzaian, Arvin, Haj-Mirzaian, Arya, Hamadeh, R.R., Hamidi, S., Handal, A.J., Hankey, G.J., Hao, Y., Harb, H.L., Harikrishnan, S., Haro, J.M., Hasan, M., Hassankhani, H., Hassen, H.Y., Havmoeller, R., Hawley, C.N., Hay, R.J., Hay, S.I., Hedayatizadeh-Omran, A., Heibati, B., Hendrie, D., Henok, A., Herteliu, C., Heydarpour, S., Hibstu, D.T., Hoang, H.T., Hoek, H.W.,

Hoffman, H.J., Hole, M.K., Homaie Rad, E., Hoogar, P., Hosgood, H.D., Hosseini, S.M., Hosseinzadeh, M., Hostiuc, M., Hostiuc, S., Hotez, P.J., Hoy, D.G., Hsairi, M., Htet, A.S., Hu, G., Huang, J.J., Huynh, C.K., Iburg, K.M., Ikeda, C.T., Ileanu, B., Ilesanmi, O.S., Iqbal, U., Irvani, S.S.N., Irvine, C.M.S., Islam, S.M.S., Islami, F., Jacobsen, K.H., Jahangiry, L., Jahanmehr, N., Jain, S.K., Jakovljevic, M., Javanbakht, M., Jayatilleke, A.U., Jeemon, P., Jha, R.P., Jha, V., Ji, J.S., Johnson, C.O., Jonas, J.B., Jozwiak, J.J., Jungari, S.B., Jürisson, M., Kabir, Z., Kadel, R., Kahsay, A., Kalani, R., Kanchan, T., Karami, M., Karami Matin, B., Karch, A., Karema, C., Karimi, N., Karimi, S.M., Kasaeian, A., Kassa, D.H., Kassa, G.M., Kassa, T.D., Kassebaum, N.J., Katikireddi, S.V., Kawakami, N., Karyani, A.K., Keighobadi, M.M., Keiyoro, P.N., Kemmer, L., Kemp, G.R., Kengne, A.P., Keren, A., Khader, Y.S., Khafaei, B., Khafaie, M.A., Khajavi, A., Khalil, I.A., Khan, E.A., Khan, M.S., Khan, M.A., Khang, Y.-H., Khazaei, M., Khoja, A.T., Khosravi, A., Khosravi, M.H., Kiadaliri, A.A., Kiirithio, D.N., Kim, C.-I., Kim, D., Kim, P., Kim, Y.-E., Kim, Y.J., Kimokoti, R.W., Kinfu, Y., Kisa, A., Kissimova-Skarbek, K., Kivimäki, M., Knudsen, A.K.S., Kocarnik, J.M., Kochhar, S., Kokubo, Y., Kolola, T., Kopec, J.A., Kosen, S., Kotsakis, G.A., Koul, P.A., Koyanagi, A., Kravchenko, M.A., Krishan, K., Krohn, K.J., Kuate Defo, B., Kucuk Bicer, B., Kumar, G.A., Kumar, M., Kyu, H.H., Lad, D.P., Lad, S.D., Lafranconi, A., Lalloo, R., Lallukka, T., Lami, F.H., Lansingh, V.C., Latifi, A., Lau, K.M.-M., Lazarus, J. V., Leasher, J.L., Ledesma, J.R., Lee, P.H., Leigh, J., Leung, J., Levi, M., Lewycka, S., Li, S., Li, Y., Liao, Y., Liben, M.L., Lim, L.-L., Lim, S.S., Liu, S., Lodha, R., Looker, K.J., Lopez, A.D., Lorkowski, S., Lotufo, P.A., Low, N., Lozano, R., Lucas, T.C.D., Lucchesi, L.R., Lunevicius, R., Lyons, R.A., Ma, S., Macarayan, E.R.K., Mackay, M.T., Madotto, F., Magdy Abd El Razek, H., Magdy Abd El Razek, M., Maghavani, D.P., Mahotra, N.B., Mai, H.T., Majdan, M., Majdzadeh, R., Majeed, A., Malekzadeh, R., Malta, D.C., Mamun, A.A., Manda, A.-L., Manguerra, H., Manhertz, T., Mansournia, M.A., Mantovani, L.G., Mapoma, C.C., Maravilla, J.C., Marcenes, W., Marks, A., Martins-Melo, F.R., Martopullo, I., März, W., Marzan, M.B., Mashamba-Thompson, T.P., Massenbourg, B.B., Mathur, M.R., Matsushita, K., Maulik, P.K., Mazidi, M., McAlinden, C., McGrath, J.J., McKee, M., Mehndiratta, M.M., Mehrotra, R., Mehta, K.M., Mehta, V., Mejia-Rodriguez, F., Mekonen, T., Melese, A., Melku, M., Meltzer, M., Memiah, P.T.N., Memish, Z.A., Mendoza, W., Mengistu, D.T., Mengistu, G., Mensah, G.A., Mereta, S.T., Meretoja, A., Meretoja, T.J., Mestrovic, T., Mezerji, N.M.G., Miazgowski, B., Miazgowski, T., Milllear, A.I., Miller, T.R., Miltz, B., Mini, G.K., Mirarefin, M., Mirraikhimov, E.M., Misganaw, A.T., Mitchell, P.B., Mitiku, H., Moazen, B., Mohajer, B., Mohammad, K.A., Mohammadifard, N., Mohammadnia-Afrouzi, M., Mohammed, M.A., Mohammed, S., Mohebi, F., Moitra, M., Mokdad, A.H., Molokhia, M., Monasta, L., Moodley, Y., Moosazadeh, M., Moradi, G., Moradi-Lakeh, M., Moradinazar, M., Moraga, P., Morawska, L., Moreno Velásquez, I., Morgado-Da-Costa, J., Morrison, S.D., Moschos, M.M., Mountjoy-Venning, W.C., Mousavi, S.M., Mruts, K.B., Muche, A.A.,

Muchie, K.F., Mueller, U.O., Muhammed, O.S., Mukhopadhyay, S., Muller, K., Mumford, J.E., Murhekar, M., Musa, J., Musa, K.I., Mustafa, G., Nabhan, A.F., Nagata, C., Naghavi, M., Naheed, A., Nahvijou, A., Naik, G., Naik, N., Najafi, F., Naldi, L., Nam, H.S., Nangia, V., Nansseu, J.R., Nascimento, B.R., Natarajan, G., Neamati, N., Negoi, I., Negoi, R.I., Neupane, S., Newton, C.R.J., Ngunjiri, J.W., Nguyen, A.Q., Nguyen, Ha Thu, Nguyen, H.L.T., Nguyen, Huong Thanh, Nguyen, L.H., Nguyen, M., Nguyen, N.B., Nguyen, S.H., Nichols, E., Ningrum, D.N.A., Nixon, M.R., Nolutshungu, N., Nomura, S., Norheim, O.F., Noroozi, M., Norrving, B., Noubiap, J.J., Nouri, H.R., Nourollahpour Shiadeh, M., Nowroozi, M.R., Nsoesie, E.O., Nyasulu, P.S., Odell, C.M., Ofori-Asenso, R., Ogbo, F.A., Oh, I.-H., Oladimeji, O., Olagunju, A.T., Olagunju, T.O., Olivares, P.R., Olsen, H.E., Olusanya, B.O., Ong, K.L., Ong, S.K., Oren, E., Ortiz, A., Ota, E., Otstavnov, S.S., Øverland, S., Owolabi, M.O., P A, M., Pacella, R., Pakpour, A.H., Pana, A., Panda-Jonas, S., Parisi, A., Park, E.-K., Parry, C.D.H., Patel, S., Pati, S., Patil, S.T., Patle, A., Patton, G.C., Paturi, V.R., Paulson, K.R., Pearce, N., Pereira, D.M., Perico, N., Pesudovs, K., Pham, H.Q., Phillips, M.R., Pigott, D.M., Pillay, J.D., Piradov, M.A., Pirsheh, M., Pishgar, F., Plana-Ripoll, O., Plass, D., Polinder, S., Popova, S., Postma, M.J., Pourshams, A., Poustchi, H., Prabhakaran, D., Prakash, S., Prakash, V., Purcell, C.A., Purwar, M.B., Qorbani, M., Quistberg, D.A., Radfar, A., Rafay, A., Rafiei, A., Rahim, F., Rahimi, K., Rahimi-Movaghar, A., Rahimi-Movaghar, V., Rahman, M., Rahman, M.H. ur, Rahman, M.A., Rahman, S.U., Rai, R.K., Rajati, F., Ram, U., Ranjan, P., Ranta, A., Rao, P.C., Rawaf, D.L., Rawaf, S., Reddy, K.S., Reiner, R.C., Reinig, N., Reitsma, M.B., Remuzzi, G., Renzaho, A.M.N., Resnikoff, S., Rezaei, S., Rezai, M.S., Ribeiro, A.L.P., Roberts, N.L.S., Robinson, S.R., Roeveer, L., Ronfani, L., Roshandel, G., Rostami, A., Roth, G.A., Roy, A., Rubagotti, E., Sachdev, P.S., Sadat, N., Saddik, B., Sadeghi, E., Saeedi Moghaddam, S., Safari, H., Safari, Y., Safari-Faramani, R., Safdarian, M., Safi, S., Safiri, S., Sagar, R., Sahebkar, A., Sahraian, M.A., Sajadi, H.S., Salam, N., Salama, J.S., Salamati, P., Saleem, K., Saleem, Z., Salimi, Y., Salomon, J.A., Salvi, S.S., Salz, I., Samy, A.M., Sanabria, J., Sang, Y., Santomauro, D.F., Santos, I.S., Santos, J.V., Santric Milicevic, M.M., Sao Jose, B.P., Sardana, M., Sarker, A.R., Sarrafzadegan, N., Sartorius, B., Sarvi, S., Sathian, B., Satpathy, M., Sawant, A.R., Sawhney, M., Saxena, S., Saylan, M., Schaeffner, E., Schmidt, M.I., Schneider, I.J.C., Schöttker, B., Schwebel, D.C., Schwendicke, F., Scott, J.G., Sekerija, M., Sepanlou, S.G., Serván-Mori, E., Seyedmousavi, S., Shabaninejad, H., Shafieesabet, A., Shahbazi, M., Shaheen, A.A., Shaikh, M.A., Shams-Beyranvand, M., Shamsi, M., Shamsizadeh, M., Sharafi, H., Sharafi, K., Sharif, M., Sharif-Alhoseini, M., Sharma, M., Sharma, R., She, J., Sheikh, A., Shi, P., Shibuya, K., Shigematsu, M., Shiri, R., Shirkoobi, R., Shishani, K., Shiue, I., Shokraneh, F., Shoman, H., Shrimme, M.G., Si, S., Siabani, S., Siddiqi, T.J., Sigfusdottir, I.D., Sigurvinsdottir, R., Silva, J.P., Silveira, D.G.A., Singam, N.S.V., Singh, J.A., Singh, N.P., Singh, V., Sinha, D.N., Skiadaresi, E., Slepak, E.L.N., Sliwa, K., Smith, D.L., Smith, M., Soares

Filho, A.M., Sobaih, B.H., Sobhani, S., Sobngwi, E., Soneji, S.S., Soofi, M., Soosaraei, M., Sorensen, R.J.D., Soriano, J.B., Soyiri, I.N., Sposato, L.A., Sreeramareddy, C.T., Srinivasan, V., Stanaway, J.D., Stein, D.J., Steiner, C., Steiner, T.J., Stokes, M.A., Stovner, L.J., Subart, M.L., Sudaryanto, A., Sufiyan, M.B., Sunguya, B.F., Sur, P.J., Sutradhar, I., Sykes, B.L., Sylte, D.O., Tabarés-Seisdedos, R., Tadakamadla, S.K., Tadesse, B.T., Tandon, N., Tassew, S.G., Tavakkoli, M., Taveira, N., Taylor, H.R., Tehrani-Banihashemi, A., Tekalign, T.G., Tekelemedhin, S.W., Tekle, M.G., Temesgen, H., Temsah, M.-H., Temsah, O., Terkawi, A.S., Teweldemedhin, M., Thankappan, K.R., Thomas, N., Tilahun, B., To, Q.G., Tonelli, M., Topor-Madry, R., Topouzis, F., Torre, A.E., Tortajada-Girbés, M., Touvier, M., Tovani-Palone, M.R., Towbin, J.A., Tran, B.X., Tran, K.B., Troeger, C.E., Truelsen, T.C., Tsilimbaris, M.K., Tsoi, D., Tudor Car, L., Tuzcu, E.M., Ukwaja, K.N., Ullah, I., Undurraga, E.A., Unutzer, J., Updike, R.L., Usman, M.S., Uthman, O.A., Vaduganathan, M., Vaezi, A., Valdez, P.R., Varughese, S., Vasankari, T.J., Venketasubramanian, N., Villafaina, S., Violante, F.S., Vladimirov, S.K., Vlassov, V., Vollset, S.E., Vosoughi, K., Vujcic, I.S., Wagnew, F.S., Waheed, Y., Waller, S.G., Wang, Y., Wang, Y.-P., Weiderpass, E., Weintraub, R.G., Weiss, D.J., Weldegebreal, F., Weldegewergs, K.G., Werdecker, A., West, T.E., Whiteford, H.A., Widecka, J., Wijeratne, T., Wilner, L.B., Wilson, S., Winkler, A.S., Wiyeh, A.B., Wiysonge, C.S., Wolfe, C.D.A., Woolf, A.D., Wu, S., Wu, Y.-C., Wyper, G.M.A., Xavier, D., Xu, G., Yadgir, S., Yadollahpour, A., Yahyazadeh Jabbari, S.H., Yamada, T., Yan, L.L., Yano, Y., Yaseri, M., Yasin, Y.J., Yeshaneh, A., Yimer, E.M., Yip, P., Yisma, E., Yonemoto, N., Yoon, S.-J., Yotebieng, M., Younis, M.Z., Yousefifard, M., Yu, C., Zadnik, V., Zaidi, Z., Zaman, S. Bin, Zamani, M., Zare, Z., Zeleke, A.J., Zenebe, Z.M., Zhang, K., Zhao, Z., Zhou, M., Zodpey, S., Zucker, I., Vos, T., Murray, C.J.L., 2018. Global, regional, and national incidence, prevalence, and years lived with disability for 354 diseases and injuries for 195 countries and territories, 1990–2017: a systematic analysis for the Global Burden of Disease Study 2017. *Lancet* 392, 1789–1858.

Katan, M., Luft, A., 2018. Global Burden of Stroke. *Semin. Neurol.* 38, 208–211.

Kautzky-Willer, A., Harreiter, J., Pacini, G., 2016. Sex and Gender Differences in Risk, Pathophysiology and Complications of Type 2 Diabetes Mellitus. *Endocr. Rev.* 37, 278–316.

Kemenkes RI, 2018. Laporan Nasional RISKESDAS 2018, Riskesdas 2018.

Kongsawasdi, S., Klaphajone, J., Wivatvongvana, P., Watcharasaksilp, K., 2019. Prognostic Factors of Functional Outcome Assessed by Using the Modified Rankin Scale in Subacute Ischemic Stroke. *J. Clin. Med. Res.* 11, 375–382.

Krishnamurthi, R. V., Feigin, V.L., Forouzanfar, M.H., Mensah, G.A., Connor, M., Bennett, D.A., Moran, A.E., Sacco, R.L., Anderson, L.M., Truelsen, T., O'Donnell, M., Venketasubramanian, N., Barker-Collo, S., Lawes, C.M.M.,

- Wang, W., Shinohara, Y., Witt, E., Ezzati, M., Naghavi, M., Murray, C., 2013. Global and regional burden of first-ever ischaemic and haemorrhagic stroke during 1990–2010: findings from the Global Burden of Disease Study 2010. *Lancet Glob. Heal.* 1, e259–e281.
- Kumar, V., Abbas, A.K., Aster, J.C., 2015. *Robbins and Cotran’s Pathological Basis of Disease*, Elsevier Health Sciences.
- Kusumaningsih, W., Rachmayanti, S., Werdhani, R.A., 2017. Relationship between risk factors and activities of daily living using modified Shah Barthel Index in stroke patients. *J. Phys. Conf. Ser.* 884.
- Laina, A., Stellos, K., Stamatelopoulos, K., 2018. Vascular ageing: Underlying mechanisms and clinical implications. *Exp. Gerontol.* 109, 16–30.
- Lamsudin, R., 1996. *Algoritma Stroke Gadjah Mada Penyusunan dan Validasi untuk Membedakan Stroke Perdarahan Intraserbral dengan Stroke Iskemik atau Stroke Infark*. Berkala Ilmu Kedokteran.
- Lattanzi, S., Silvestrini, M., Provinciali, L., 2013. Elevated Blood Pressure in the Acute Phase of Stroke and the Role of Angiotensin Receptor Blockers. *Int. J. Hypertens.* 2013, 1–8.
- Lau, L., Lew, J., Borschmann, K., Thijs, V., Ekinici, E.I., 2019. Prevalence of diabetes and its effects on stroke outcomes: A meta-analysis and literature review. *J. Diabetes Investig.* 10, 780–792.
- Li, S., 2017. Spasticity, Motor Recovery, and Neural Plasticity after Stroke. *Front. Neurol.* 8.
- Lin, M.P., Liebeskind, D.S., 2016. Imaging of Ischemic Stroke. *Contin. Lifelong Learn. Neurol.* 22, 1399–1423.
- Lindgren, A., 2014. Stroke Genetics: A Review and Update. *J. Stroke* 16, 114.
- MacDougall, E.L., Herman, W.H., Wing, J.J., Morgenstern, L.B., Lisabeth, L.D., 2018. Diabetes and ischaemic stroke outcome. *Diabet. Med.* 35, 1249–1257.
- Mukherjee, D., Patil, C.G., 2011. Epidemiology and the Global Burden of Stroke. *World Neurosurg.* 76, S85–S90.
- Musuka, T.D., Wilton, S.B., Traboulsi, M., Hill, M.D., 2015. Diagnosis and management of acute ischemic stroke: speed is critical. *Can. Med. Assoc. J.* 187, 887–893.
- O’Donnell, M.J., Chin, S.L., Rangarajan, S., Xavier, D., Liu, L., Zhang, H., Rao-Melacini, P., Zhang, X., Pais, P., Agapay, S., Lopez-Jaramillo, P., Damasceno, A., Langhorne, P., McQueen, M.J., Rosengren, A., Dehghan, M., Hankey, G.J., Dans, A.L., Elsayed, A., Avezum, A., Mondo, C., Diener, H.-C., Ryglewicz, D., Czlonkowska, A., Pogosova, N., Weimar, C., Iqbal, R.,

- Diaz, R., Yusoff, K., Yusufali, A., Oguz, A., Wang, X., Penaherrera, E., Lanas, F., Ogah, O.S., Ogunniyi, A., Iversen, H.K., Malaga, G., Rumboldt, Z., Oveisgharan, S., Al Hussain, F., Magazi, D., Nilanont, Y., Ferguson, J., Pare, G., Yusuf, S., 2016. Global and regional effects of potentially modifiable risk factors associated with acute stroke in 32 countries (INTERSTROKE): a case-control study. *Lancet* 388, 761–775.
- Pan, S.-L., Wu, S.-C., Wu, T.-H., Lee, T.-K., Chen, T.H.-H., 2006. Location and size of infarct on functional outcome of noncardioembolic ischemic stroke. *Disabil. Rehabil.* 28, 977–983.
- Powers, W.J., Rabinstein, A.A., Ackerson, T., Adeoye, O.M., Bambakidis, N.C., Becker, K., Biller, J., Brown, M., Demaerschalk, B.M., Hoh, B., Jauch, E.C., Kidwell, C.S., Leslie-Mazwi, T.M., Ovbiagele, B., Scott, P.A., Sheth, K.N., Southerland, A.M., Summers, D. V., Tirschwell, D.L., 2019. Guidelines for the Early Management of Patients With Acute Ischemic Stroke: 2019 Update to the 2018 Guidelines for the Early Management of Acute Ischemic Stroke: A Guideline for Healthcare Professionals From the American Heart Association/American Stroke. *Stroke* 50.
- Protopsaltis, J., Kokkoris, S., Korantzopoulos, P., Milionis, H.J., Karzi, E., Anastasopoulou, A., Filioti, K., Antonopoulos, S., Melidonis, A., Giannoulis, G., 2009. Prediction of long-term functional outcome in patients with acute ischemic non-embolic stroke. *Atherosclerosis* 203, 228–235.
- Rajsic, S., Gothe, H., Borba, H.H., Sroczynski, G., Vujicic, J., Toell, T., Siebert, U., 2019. Economic burden of stroke: a systematic review on post-stroke care. *Eur. J. Heal. Econ.* 20, 107–134.
- Ropper, A.H., Samuels, M.A., Klein, J., Prasad, S., 2019. Adams and Victor's Principles of Neurology 11th Edition, 11th ed. McGraw-Hill Education / Medical.
- Rost, N.S., Bottle, A., Lee, J., Randall, M., Middleton, S., Shaw, L., Thijs, V., Rinkel, G.J.E., Hemmen, T.M., 2016. Stroke Severity Is a Crucial Predictor of Outcome: An International Prospective Validation Study. *J. Am. Heart Assoc.* 5.
- Sacco, R.L., Kasner, S.E., Broderick, J.P., Caplan, L.R., Connors, J.J. (Buddy), Culebras, A., Elkind, M.S.V., George, M.G., Hamdan, A.D., Higashida, R.T., Hoh, B.L., Janis, L.S., Kase, C.S., Kleindorfer, D.O., Lee, J.-M., Moseley, M.E., Peterson, E.D., Turan, T.N., Valderrama, A.L., Vinters, H. V., 2013. An Updated Definition of Stroke for the 21st Century. *Stroke* 44, 2064–2089.
- Schulc, E., Pallauf, M., Mueller, G., Wildbahner, T., Them, C., 2015. Is the Barthel Index an Adequate Assessment Tool for Identifying a Risk Group in Elderly People Living at Home? *Int. J. Nurs. Clin. Pract.* 2.
- Setyopranoto, I., Bayuangga, H.F., Panggabean, A.S., Alifaningdyah, S., Lazuardi,

- L., Dewi, F.S.T., Malueka, R.G., 2019. Prevalence of Stroke and Associated Risk Factors in Sleman District of Yogyakarta Special Region, Indonesia. *Stroke Res. Treat.* 2019, 1–8.
- Taylor-Rowan, M., Wilson, A., Dawson, J., Quinn, T.J., 2018. Functional assessment for acute stroke trials: Properties, analysis, and application. *Front. Neurol.*
- Tu, H.T.H., Campbell, B.C. V., Christensen, S., Desmond, P.M., De Silva, D.A., Parsons, M.W., Churilov, L., Lansberg, M.G., Mlynash, M., Olivot, J.-M., Straka, M., Bammer, R., Albers, G.W., Donnan, G.A., Davis, S.M., 2015. Worse Stroke Outcome in Atrial Fibrillation is Explained by More Severe Hypoperfusion, Infarct Growth, and Hemorrhagic Transformation. *Int. J. Stroke* 10, 534–540.
- Ullberg, T., Zia, E., Petersson, J., Norrving, B., 2015. Changes in Functional Outcome Over the First Year After Stroke. *Stroke* 46, 389–394.
- Venketasubramanian, N., Yoon, B.W., Pandian, J., Navarro, J.C., 2017. Stroke Epidemiology in South, East, and South-East Asia: A Review. *J. Stroke* 19, 286–294.
- Wang, Y., Dai, Y., Zheng, J., Xie, Y., Guo, R., Guo, X., Sun, G., Sun, Z., Sun, Y., Zheng, L., 2019. Sex difference in the incidence of stroke and its corresponding influence factors: Results from a follow-up 8.4 years of rural China hypertensive prospective cohort study. *Lipids Health Dis.*
- Zhou, B., Lu, Y., Hajifathalian, K., Benthall, J., Di Cesare, M., Danaei, G., Bixby, H., Cowan, M., Ali, M., Taddei, C., Lo, W., Reis-Santos, B., Stevens, G., Riley, L., Miranda, J., Bjerregaard, P., Rivera, J., Fouad, H., Ma, G., Mbanya, J., McGarvey, S., Mohan, V., Onat, A., Pilav, A., Ramachandran, A., Romdhane, H., Paciorek, C., Bennett, J., Ezzati, M., Abdeen, Z., Abdul Kadir, K., Abu-Rmeileh, N., Acosta-Cazares, B., Adams, R., Aekplakorn, W., Aguilar-Salinas, C., Agyemang, C., Ahmadvand, A., Al-Othman, A., Alkerwi, A., Amouyel, P., Amuzu, A., Andersen, L., Anderssen, S., Anjana, R., Aounallah-Skhiri, H., Aris, T., Arlappa, N., Arveiler, D., Assah, F., Avdicová, M., Azizi, F., Balakrishna, N., Bandosz, P., Barbagallo, C., Barceló, A., Batieha, A., Baur, L., Romdhane, H., Benet, M., Bernabe-Ortiz, A., Bharadwaj, S., Bhargava, S., Bi, Y., Bjerregaard, P., Bjertness, E., Bjertness, M., Björkelund, C., Blokstra, A., Bo, S., Boehm, B., Boissonnet, C., Bovet, P., Brajkovich, I., Breckenkamp, J., Brenner, H., Brewster, L., Brian, G., Bruno, G., Bugge, A., Cabrera de León, A., Can, G., Cândido, A., Capuano, V., Carlsson, A., Carvalho, M., Casanueva, F., Casas, J., Caserta, C., Castetbon, K., Chamukuttan, S., Chaturvedi, N., Chen, C., Chen, F., Chen, S., Cheng, C., Chetrit, A., Chiou, S., Cho, Y., Chudek, J., Cifkova, R., Claessens, F., Concin, H., Cooper, C., Cooper, R., Costanzo, S., Cottel, D., Cowell, C., Crujeiras, A., D'Arrigo, G., Dallongeville, J., Dankner, R., Dauchet, L., de Gaetano, G., De Henauw, S., Deepa, M., Dehghan, A.,

Deschamps, V., Dhana, K., Di Castelnuovo, A., Djalalinia, S., Doua, K., Drygas, W., Du, Y., Dzerve, V., Egbagbe, E., Eggertsen, R., El Ati, J., Elosua, R., Erasmus, R., Erem, C., Ergor, G., Eriksen, L., Escobedo-de la Peña, J., Fall, C., Farzadfar, F., Felix-Redondo, F., Ferguson, T., Fernández-Bergés, D., Ferrari, M., Ferreccio, C., Feskens, E., Finn, J., Föger, B., Foo, L., Forslund, A., Fouad, H., Francis, D., Franco Mdo, C., Franco, O., Frontera, G., Furusawa, T., Gaciong, Z., Garnett, S., Gaspoz, J., Gasull, M., Gates, L., Geleijnse, J., Ghasemian, A., Ghimire, A., Giampaoli, S., Gianfagna, F., Giovannelli, J., Giwerzman, A., Gross, M., González Rivas, J., Gorbea, M., Gottrand, F., Grafnetter, D., Grodzicki, T., Grøntved, A., Gruden, G., Gu, D., Guan, O., Guerrero, R., Guessous, I., Guimaraes, A., Gutierrez, L., Hambleton, I., Hardy, R., Hari Kumar, R., Hata, J., He, J., Heidemann, C., Herrala, S., Hihtaniemi, I., Ho, SY, Ho, SC, Hofman, A., Hormiga, C., Horta, B., Houti, L., Howitt, C., Htay, T., Htet, A., Htike, M., Hu, Y., Hussien, A., Huybrechts, I., Hwalla, N., Iacoviello, L., Iannone, A., Ibrahim, M., Ikeda, N., Ikram, M., Irazola, V., Islam, M., Iwasaki, M., Jacobs, J., Jafar, T., Jamil, K., Jasienska, G., Jiang, C., Jonas, J., Joshi, P., Kafatos, A., Kalter-Leibovici, O., Kasaeian, A., Katz, J., Kaur, P., Kavousi, M., Keinänen-Kiukaanniemi, S., Kelishadi, R., Kengne, A., Kersting, M., Khader, Y., Khalili, D., Khang, Y., Kiechl, S., Kim, J., Kolsteren, P., Korrovits, P., Kratzer, W., Kromhout, D., Kujala, U., Kula, K., Kyobutungi, C., Laatikainen, T., Lachat, C., Laid, Y., Lam, T., Landrove, O., Lanska, V., Lappas, G., Laxmaiah, A., Leclercq, C., Lee, J., Lee, J., Lehtimäki, T., Lekhraj, R., León-Muñoz, L., Li, Y., Lim, W., Lima-Costa, M., Lin, H., Lin, X., Lissner, L., Lorbeer, R., Lozano, J., Luksiene, D., Lundqvist, A., Lytsy, P., Ma, G., Machado-Coelho, G., Machi, S., Maggi, S., Magliano, D., Makdisse, M., Mallikharjuna Rao, K., Manios, Y., Manzato, E., Margozzini, P., Marques-Vidal, P., Martorell, R., Masoodi, S., Mathiesen, E., Matsha, T., Mbanya, J., McFarlane, S., McGarvey, S., McLachlan, S., McNulty, B., Mediene-Benchekor, S., Meirhaeghe, A., Menezes, A., Merat, S., Meshram, I., Mi, J., Miquel, J., Miranda, J., Mohamed, M., Mohammad, K., Mohammadifard, N., Mohan, V., Mohd Yusoff, M., Möller, N., Molnár, D., Mondo, C., Morejon, A., Moreno, L., Morgan, K., Moschonis, G., Mossakowska, M., Mostafa, A., Mota, J., Motta, J., Mu, T., Muiesan, M., Müller-Nurasyid, M., Mursu, J., Nagel, G., Námesná, J., Nang, E., NangThetia, V., Navarrete-Muñoz, E., Ndiaye, N., Nenko, I., Nervi, F., Nguyen, N., Nguyen, Q., Nieto-Martínez, R., Ning, G., Ninomiya, T., Noale, M., Noto, D., Nsour, M., Ochoa-Avilés, A., Oh, K., Onat, A., Ordunez, P., Osmond, C., Otero, J., Owusu-Dabo, E., Pahomova, E., Palmieri, L., Panda-Jonas, S., Panza, F., Parsaeian, M., Peixoto, S., Pelletier, C., Peltonen, M., Peters, A., Peykari, N., Pham, S., Pilav, A., Pitakaka, F., Piwonska, A., Piwonski, J., Plans-Rubió, P., Porta, M., Portegies, M., Poustchi, H., Pradeepa, R., Price, J., Punab, M., Qasrawi, R., Qorbani, M., Radisauskas, R., Rahman, M., Raitakari, O., Rao, S., Ramachandran, A., Ramke, J., Ramos, R., Rampal, S., Rathmann, W., Redon, J., Reganit, P., Rigo, F., Robinson, S., Robitaille, C., Rodríguez-Artalejo, F., Rodriguez-Perez Mdel, C., Rodríguez-Villamizar, L., Rojas-Martinez, R.,

Ronkainen, K., Rosengren, A., Rubinstein, A., Rui, O., Ruiz-Betancourt, B., Russo Horimoto, R., Rutkowski, M., Sabanayagam, C., Sachdev, H., Saidi, O., Sakarya, S., Salanave, B., Salonen, J., Salvetti, M., Sánchez-Abanto, J., Santos, D., dos Santos, RN, Santos, Rute, Saramies, J., Sardinha, L., Sarrafzadegan, N., Saum, K., Scazufca, M., Schargrotsky, H., Scheidt-Nave, C., Sein, A., Sharma, S., Shaw, J., Shibuya, K., Shin, Y., Shiri, R., Siantar, R., Sibai, A., Simon, M., Simons, J., Simons, L., Sjostrom, M., Slowikowska-Hilczer, J., Slusarczyk, P., Smeeth, L., Snijder, M., So, H., Sobngwi, E., Söderberg, S., Solfrizzi, V., Sonestedt, E., Soumare, A., Staessen, J., Stathopoulou, M., Steene-Johannessen, J., Stehle, P., Stein, A., Stessman, J., Stöckl, D., Stokwiszewski, J., Stronks, K., Strufaldi, M., Sun, C., Sundström, J., Sung, Y., Suriyawongpaisal, P., Sy, R., Tai, E., Tamosiunas, A., Tang, L., Tarawneh, M., Tarqui-Mamani, C., Taylor, A., Theobald, H., Thijs, L., Thuesen, B., Tolonen, H., Tolstrup, J., Topbas, M., Torrent, M., Traissac, P., Trinh, O., Tulloch-Reid, M., Tuomainen, T., Turley, M., Tzourio, C., Ueda, P., Ukoli, F., Ulmer, H., Uusitalo, H., Valdivia, G., Valvi, D., van Rossem, L., van Valkengoed, I., Vanderschueren, D., Vanuzzo, D., Vega, T., Velasquez-Melendez, G., Veronesi, G., Verschuren, W., Verstraeten, R., Viet, L., Vioque, J., Virtanen, J., Visvikis-Siest, S., Viswanathan, B., Vollenweider, P., Voutilainen, S., Vrijheid, M., Wade, A., Wagner, A., Walton, J., Wan Mohamud, W., Wang, F., Wang, M., Wang, Q., Wang, Y., Wannamethee, S., Weerasekera, D., Whincup, P., Widhalm, K., Wiecek, A., Wijga, A., Wilks, R., Willeit, J., Wilsgaard, T., Wojtyniak, B., Wong, T., Woo, J., Woodward, M., Wu, F., Wu, S., Xu, H., Yan, W., Yang, X., Ye, X., Yoshihara, A., Younger-Coleman, N., Zambon, S., Zargar, A., Zdrojewski, T., Zhao, W., Zheng, Y., Zúñiga Cisneros, J., 2016. Worldwide trends in diabetes since 1980: a pooled analysis of 751 population-based studies with 4.4 million participants. *Lancet* 387, 1513–1530.