

DAFTAR PUSTAKA

- Alam, S.L.S., Purnamasari, R., Bahar, E. and Rahadian, K.Y.K., 2014. Mentzer index as a screening tool for iron deficiency anemia in 6-12-year-old children. *Paediatrica Indonesiana*, 54(5):294-298.
- AlFadhli, S.M., Al-Awadhi, A.M. and AlKhaldi, D.A., 2007. Validity assessment of nine discriminant functions used for the differentiation between iron deficiency anemia and thalassemia minor. *Journal of Tropical Pediatrics*, 53(2):93-97.
- Alvarez-Uria, G., Naik, P.K., Midde, M., Yalla, P.S. and Pakam, R., 2014. Prevalence and severity of anaemia stratified by age and gender in rural India. *Anemia*, 2014.
- Anamisa, D.R. 2015. Rancang Bangun Metode OTSU Untuk Deteksi Hemoglobin. *S@CIES*, 5(2):106-110.
- Andriastuti, M., Ilmana, G., Nawangwulan, S.A. and Kosasih, K.A., 2020. Prevalence of anemia and iron profile among children and adolescent with low socio-economic status. *International Journal of Pediatrics and Adolescent Medicine*, 7(2):88-92.
- Arif. 2022. 2.500 Bayi Talasemia Lahir Per Tahun di Indonesia. <https://www.kompas.id/baca/humaniora/2022/08/12/2500-bayi-lahir-per-tahun-di-indonesia-mengalami-thalassemia>. Diakses tanggal 4 April 2023.
- Arora, S., Rana, D., Kolte, S., Dawson, L. and Dhawan, I., 2018. Validation of new indices for differentiation between iron deficiency anemia and beta thalassemia trait, a study in pregnant females. *International Journal of Scientific Reports*, 4(2):26.
- Bahraen, R., 2021. Penentuan Cut-off Indeks Diskriminasi Diagnosis Pada Anemia Defisiensi Besi Dan Beta Thalassemia Minor. *Jurnal Kedokteran*, 10(1):400-404.
- Brancaleoni, V., Di Pierro, E., Motta, I. and Cappellini, M.D., 2016. Laboratory diagnosis of thalassemia. *International Journal of Laboratory Hematology*, 38:32-40.
- Barnhart-Magen, G., Gotlib, V., Marilus, R. and Einav, Y., 2013. Differential diagnostics of thalassemia minor by artificial neural networks model. *Journal of Clinical Laboratory Analysis*, 27(6):481-486.
- Bryant, B.J., Hopkins, J.A., Arceo, S.M. and Leitman, S.F., 2009. Evaluation of low red blood cell mean corpuscular volume in an apheresis donor population. *Transfusion*, 49(9):1971-1976.
- Clarke, G.M. and Higgins, T.N., 2000. Laboratory investigation of hemoglobinopathies and thalassemias: review and update. *Clinical Chemistry*, 46(8):1284-1290.
- Dahlan, S. 2014. *Deskriptif, Bivariat, dan Multivariat dilengkapi Aplikasi Menggunakan SPSS*. 6th ed. Jakarta: Epidemiologi Indonesia.pp 87-89
- Dasharatham, P. and Reddy, V. S., 2018. A study of etiological and clinical profile of patients with severe anemia in a tertiary care hospital. *International Journal; Advanced Medical*, 5:1422-1429.
- Dati, F., Johnson, A.M., Whicher, J.T., 2001. The existing interim consensus reference ranges and the future approach. *Clinical Chemical and*

- Laboratory Medicine*. 39: 1134–1136.
- d'Onofrio, G., Zini, G., Ricerca, B.M., Mancini, S. and Mango, G., 1992. Automated measurement of red blood cell microcytosis and hypochromia in iron deficiency and beta-thalassemia trait. *Archives of pathology & laboratory medicine*, 116(1):84-89.
- Ehsani, M.A., Shahgholi, E., Rahiminejad, M.S., Seighali, F. and Rashidi, A., 2009. A new index for discrimination between iron deficiency anemia and beta-thalassemia minor: results in 284 patients. *Pakistan Journal of Biological Sciences: PJBS*, 12(5):473-475.
- England, J.M. and Fraser, P., 1973. Differentiation of iron deficiency from thalassaemia trait by routine blood-count. *The Lancet*, 301(7801):449-452.
- Faraj, S.A., Ansaf, A.I. and Mahdi, L.S., 2019. Value of the Matos and Carvalho index for thalassemia trait detection, experience of single hematological center in Iraq. *Iraqi Journal of Hematology*, 8(2):59
- Ferdian, B.A., Rosdiana, N. and Lubis, B. 2009. Impact of iron therapy on Mentzer index and red cell distribution width index in primary school children with iron deficiency anemia. *Paediatrica Indonesiana*, 49(4):195-9.
- Ferrara, M., Capozzi, L., Russo, R., Bertocco, F. and Ferrara, D., 2010. Reliability of red blood cell indices and formulas to discriminate between β thalassemia trait and iron deficiency in children. *Hematology*, 15(2):112-115.
- Fitriany, J. and Saputri, A.I. 2018. Anemia defisiensi besi. *AVERROUS: Jurnal Kedokteran dan Kesehatan Malikussaleh*, 4(2):1-14.
- Fletcher, A., Forbes, A., Svenson, N., Wayne Thomas, D. and A British Society for Haematology Good Practice Paper, 2022. Guideline for the laboratory diagnosis of iron deficiency in adults (excluding pregnancy) and children. *British Journal of Haematology*, 196(3):523-529.
- Fucharoen, S. and Winichagoon, P., 2011. Haemoglobinopathies in southeast Asia. *The Indian journal of Medical Research*, 134(4):498.
- Galanello, R. and Origa, R. 2010. Beta-thalassemia. *Orphanet Journal of Rare Diseases*, 5:1-15.
- Green, R. and King, R. 1989. A new red cell discriminant incorporating volume dispersion for differentiating iron deficiency anemia from thalassemia minor. *Blood cells*, 15(3):.481-91.
- Gulani, A. and Weiler, T. 2022. *Genetics, autosomal recessive*. In *StatPearls [Internet]*. StatPearls Publishing.pp: 231-233.
- Handayani, N.S.N. and Onggo, A.T. 2014. Identifikasi Mutasi Gen β Globin Ekson 1 Pada Pembawa Thalassemia. *Biogenesis: Jurnal Ilmiah Biologi*, 2(1):63-69.
- Hamed, E.O. and El-Deen, A.F., 2019. Simple red cell indices in screening and discrimination of iron deficiency anemia and beta thalassemia trait in Egyptian patients. *Open Journal of Blood Diseases*, 9(01):9-19.
- Harahap, R.I.M., Prihatni, D. and Rostini, T., 2019. The compatibility measurement of Mentzer, England & Fraser, Shine & Lal, and Srivastava indices to the hemoglobin electrophoresis result for beta thalassemia trait screening. *Bali Medical Journal*, 8(2):403-407.
- Hashemizadeh, H.A.Y.D.E.H. and Noori, R., 2013. Premarital screening of beta thalassemia minor in north-east of Iran. *Iranian Journal of Pediatric Hematology and Oncology*, 3(1):210.

- Hoffmann, J.J. and Urrechaga, E., 2017. Assessment of the Matos & Carvalho index for distinguishing thalassemia from iron deficiency anemia. *Revista Brasileira de Hematologia e Hemoterapia*, 39:288-289.
- Hoffmann, J.J., Urrechaga, E. and Aguirre, U. 2015. Discriminant indices for distinguishing thalassemia and iron deficiency in patients with microcytic anemia: a meta-analysis. *Clinical Chemistry and Laboratory Medicine (CCLM)*, 53(12): 1883-1894.
- Hossain, M. S., Raheem, E., Sultana, T. A., Ferdous, S., Nahar, N., Islam, S., Arifuzzaman, M., Razzaque, M. A., Alam, R., Aziz, S., Khatun, H., Rahim, A., & Morshed, M. 2017. Thalassemias in South Asia: clinical lessons learnt from Bangladesh. *Orphanet Journal of Rare Diseases*, 12(1):1–9.
- Husna, N., Sanka, I., Al Arif, A., Putri, C., Leonard, E., & Handayani, N. S. N. 2017. Prevalence and distribution of thalassemia trait screening. *Journal Medical Science*, 49(3):106-113.
- Handayani, N. S. N., Husna, N., Rahmil, G., Ghifari, R. A., Widyawati, L., & Lesmana, I. (2020). Splice site and Frameshift Mutations of β -Globin Gene Found in Thalassemia Carrier Screening in Yogyakarta Special Region, Indonesia. *The Indonesian Biomedical Journal*, 13(1): 55–60.
- Ikehara K. Advances in the study of genetic disorders. *Europe: InTech*, 2011:101.
- Indrasari, Y.N., Hernaningsih, Y., Fitriah, M., Hajat, A., Gede Ugrasena, I.D. and Yusoff, N.M., 2021. Reliability of Different RBC Indices and Formulas in the Discrimination of β -Thalassemia Minor and Iron Deficiency Anemia in Surabaya, Indonesia. *Indian Journal of Forensic Medicine & Toxicology*, 15(1):984-988
- Jahangiri, M., Rahim, F., & Malehi, A. S. 2019. Diagnostic performance of hematological discrimination indices to discriminate between β thalassemia trait and iron deficiency anemia and using cluster analysis: Introducing two new indices tested in Iranian population. *Scientific Reports*, 9(1): 1–13.
- Jameel, T., Baig, M., Ahmed, I., Hussain, M.B. and bin Doghaim Alkhamaly, M. 2017. Differentiation of beta thalassemia trait from iron deficiency anemia by hematological indices. *Pakistan Journal of Medical Sciences*, 33(3):665.
- Janel, A., Roszyk, L., Rapatel, C., Mareynat, G., Berger, M.G. and Serre-Sapin, A.F., 2011. Proposal of a score combining red blood cell indices for early differentiation of beta-thalassemia minor from iron deficiency anemia. *Hematology*, 16(2): 123-127.
- Junaidi, J. and Apriyanto, T. 2018. Hubungan Kadar Hemoglobin dengan Kapasitas Aerobik Maksimal Pada Atlet Nasional Rugby Indonesia. In *Prosiding Seminar dan Lokakarya Fakultas Ilmu Keolahragaan Universitas Negeri Jakarta*, 3(1):44-51
- Karimi, M.E.H.R.A.N. and Rasekhi, A.R., 2002. Efficiency of premarital screening of beta-thalassemia trait using MCH rather than MCV in the population of Fars Province, Iran. *Haematologia*, 32(2):129-133.
- Kjeldsberg, C.R., Bahler, D.W., Blaylock, R.C., Elenitoba-Johnson, K.S.J., Foucar, K., Lim, M.S., McKenna, R.W., O'Malley, D.P., Perkins, S.L., Peterson, L.C., Rodgers, G.M., Vardiman, J., 2006. *Practical Diagnosis of Hematologic Disorders*, Fourth Edition, 4th ed. ASCP Press, Chicago, IL.pp: 431-439
- Klee, G.G., Behrman, R. E., Kliegman, R. and Jenson, H.B., 2000. *Nelson*

- Textbook of Pediatrics*, W.B. Saunders.pp: 81-89
- Kotila, T.R., 2010. Guidelines for the diagnosis of the haemoglobinopathies in Nigeria. *Annals of Ibadan Postgraduate Medicine*, 8(1):25-29.
- Kumar, A., Saha, D., Kini, J., Murali, N., Chakraborti, S. and Adiga, D., 2017. The role of discriminant functions in screening beta thalassemia trait and iron deficiency anemia among laboratory samples. *Journal of Laboratory Physicians*, 9(03):195-201.
- Kurniati, I., 2020. Anemia defisiensi zat besi (Fe). *Jurnal Kedokteran Universitas Lampung*, 4(1):18-33.
- Langlois, S., Ford, J.C., Chitayat, D., Désilets, V.A., Farrell, S.A., Geraghty, M., Nelson, T., Nikkel, S.M., Shugar, A., Skidmore, D. and Allen, V.M., 2008. Carrier screening for thalassemia and hemoglobinopathies in Canada. *Journal of Obstetrics and Gynaecology Canada*, 30(10):950-959.
- Lai, C.Y., Tian, L. and Schisterman, E.F., 2012. Exact confidence interval estimation for the Youden index and its corresponding optimal cut-point. *Computational Statistics & Data Analysis*, 56(5):1103-1114.
- Maskoen, A.M., Rahayu, N.S., Reniarti, L., Susanah, S., Laksono, B., Fauziah, P.N., Zada, A. and Hidayat, D.S. 2017. Mutation spectrum of β -globin gene in thalassemia patients at Hasan Sadikin Hospital-West Java Indonesia. *Cellular and Molecular Biology*, 63(12):22-24.
- Matos, J. F., Dusse, L., Borges, K. B., de Castro, R. L., Coura-Vital, W., & Carvalho, M. D. G. 2016. A new index to discriminate between iron deficiency anemia and thalassemia trait. *Revista Brasileira de Hematologia e Hemoterapia*, 38:214-219.
- Mentzer Jr. 1973. Differentiation of iron deficiency from thalassaemia trait. *The Lancet*, 1(7808):882.
- Mettananda, S. and Higgs, D.R., 2018. Molecular basis and genetic modifiers of thalassemia. *Hematology/Oncology Clinics*, 32(2):177-191.
- Milman, N., 2011. Anemia—still a major health problem in many parts of the world!. *Annals of Hematology*, 90:369-377.
- Miri-Moghaddam, E. and Sargolzaie, N., 2014. Cut off determination of discrimination indices in differential diagnosis between iron deficiency anemia and β -thalassemia minor. *International Journal of Hematology-oncology and Stem Cell Research*, 8(2):27.
- Mohammed, M.E., Ahmed, A.E.A., Hassan, M.H. and Rashwan, N.I., 2019. RDW for discrimination between iron deficiency anemia and beta thalassemia trait among cohort of Egyptian children in Upper Egypt. *SVU-International Journal of Medical Sciences*, 2(2):64-68.
- Moosa, M.M., Ayub, M.I., Bashir, A.M.A., Sarwardi, G., Khan, W., Khan, H. and Yeasmin, S. 2011. Combination of two rare mutations causes β -thalassaemia in a Bangladesh patient. *Genetics and Molecular Biology*, 34:406- 409.
- Nathan, D.G. and Gunn, R.B., 1966. Thalassemia: the consequences of unbalanced hemoglobin synthesis. *The American Journal of Medicine*, 41(5):815-830.
- Nathan, D.G. and Oski, F.A. 1993. *Hematology of infancy and childhood*, 4th ed. pp: 237-240
- Ntaios, G., Chatzinikolaou, A., Saouli, Z., Girtovitis, F., Tsapanidou, M., Kaiafa, G., Kontoninas, Z., Nikolaidou, A., Savopoulos, C., Pidonia, I. and Alexiou-

- Daniel, S., 2007. Discrimination indices as screening tests for β -thalassemic trait. *Annals of Hematology*, 86:487-491.
- Niazi, M., Tahir, M., e Raziq, F. and Hameed, A., 2010. Usefulness of redcell indices in differentiating microcytic hypochromic anemias. *Gomal Journal of Medical Sciences*, 8(2):4-8
- NP, R. A. 2015. Indeks RDW dan mentzer sebagai uji skrining diagnosis thalassemia. *Jurnal Majority*, 4(7):7-12.
- Okan, V., Cigiloglu, A., Cifci, S., Yilmaz, M. and Pehlivan, M., 2009. Red cell indices and functions differentiating patients with the β -thalassaemia trait from those with iron deficiency anaemia. *Journal of International Medical Research*, 37(1):25-30.
- Pagana KD, Pagana TJ, Pagana TN. 2019. *Mosby's Diagnostic & Laboratory Test Reference*. 14th ed. St. Louis, Mo: Elsevier. Philadelphia: W B Saunders Co.pp:87-89
- Pinilih, A., Syuhada, S., Mandala, Z. and Novia, D., 2020. Perbandingan Nilai Indeks Green dan King antara Anemia Defisiensi Besi dengan Thalassemia. *Jurnal Ilmiah Kesehatan Sandi Husada*, 9(1):397-402.
- Rahim, F. and Keikhaei, B., 2009. Better differential diagnosis of iron deficiency anemia from beta-thalassemia trait. *Turkish Journal of Hematology*, 26(3):138-45.
- Rahimi Z, Rezaei M, Nagel RL, Muniz A. 2008. Molecular and hematologic analysis of hemoglobin Q-Iran and hemoglobin Setif in Iranian families. *Archives of Iranian Medicine*; 11(4):382-386.
- Reis, F.M.P., Andrade, R.R.D., Rodrigues, C.F.D.S. and Barbosa, F.T., 2020. Discriminant indexes to simplify the differential diagnosis between iron deficiency anemia and thalassemia minor in individuals with microcytic anemia. *Revista da Associação Médica Brasileira*, 66:1277-1282.
- Rathod, D.A., Kaur, A., Patel, V., Patel, K., Kabrawala, R., Patel, V., Patel, M. and Shah, P. 2007. Usefulness of cell counter-based parameters and formulas in detection of β -thalassemia trait in areas of high prevalence. *American Journal of Clinical Pathology*, 128(4):585-589.
- Ravanbakhsh, M., Mousavi, S.A. and Zare, S., 2016. Diagnostic reliability check of red cell indices in differentiating iron deficiency anemia (IDA) from beta thalassemia minor (BTT). *Hormozgan Medical Journal*, 20(3):2-4
- Rokom. 2022. Talasemia Penyakit Keturunan, Hindari dengan Deteksi Dini. <https://sehatnegeriku.kemkes.go.id/baca/rilismedia/20220510/5739792/talasemia-penyakit-keturunan-hindari-dengan-deteksi-dini/>. Diakses tanggal 27 Maret 2023, jam 14:46
- Rosita, L., 2007. Surveilans Penderita Talasemia di RSUP Dr. Sardjito Yogyakarta Tahun 2004. Mutiara Medika: *Jurnal Kedokteran dan Kesehatan*, 7(2):109-120.
- Rujito, L., Maritska, Z. and Sofro, A.S., 2023. β Thalassemia Mutation Flow in Indonesia: A Migration Perspective. *Thalassemia Reports*, 13(4):253-261.
- Rujito, L., 2019. *Talasemia: genetika dasar dan pengelolaan terkini*. Universitas Jenderal Soedirman, UNSOED Press. pp: 70
- S. and Kacan, A. 2014. Hematological indices for differential diagnosis of Beta thalassemia trait and iron deficiency anemia. *Anemia*, 2014:11-13
- Sahiratmadha, E., Wijaya, M. A. Widjajakusuma, A., Maskoen, A. M., Dewanto, J. B., & Panigoro, R. 2020. Pengetahuan Tentang Talasemia pada

- Mahasiswa Kedokteran dan Dokter Umum di Bandung serta Prevalensi Karir β -Thalassemia. *Journal Of The Indonesian Medical Association*, 70(4), 48–58.
- Salim, Y., Sukartini, N. and Setiawati, A. 2016. Erythrocyte Indices to Differentiate Iron Deficiency Anemia From $\hat{\imath}^2$ Trait Thalassemia (Indeks Eritrosit untuk Membedakan Anemia Defisiensi Besi dengan Thalassemia $\hat{\imath}^2$ Trait). *Indonesian Journal of Clinical Pathology and Medical Laboratory*, 23(1):50-55.
- Sari, T.T., Aliza, N. and Soedjatmiko, S., 2019. Indeks Mentzer sebagai Alat Diagnostik Anemia Defisiensi Besi di Sarana Kesehatan dengan Fasilitas Terbatas: Perbandingan Berbagai Nilai Cut Off. *Sari Pediatri*, 21(3):145-51.
- Sproston, N.R. and Ashworth, J.J., 2018. Role of C-reactive protein at sites of inflammation and infection. *Frontiers in Immunology*, 9:754.
- Shahid, H., Saleem, M., Naseer, N., Tabussam, S., Aziz, A. and Ullah, S., 2022. Evaluation of Srivastava index to distinguishing Beta-Thalassemia Trait from Iron Deficiency. *Pakistan Journal of Medical & Health Sciences*, 16(05):1225-1225.
- Schriever, H. and Srivastava, P.C., 1973. Differentiation of thalassaemia minor from iron deficiency. *The Lancet*, 302(7821):154-155.
- Shahid, H., Saleem, M., Naseer, N., Tabussam, S., Aziz, A. and Ullah, S., 2022. Evaluation of Srivastava index to distinguishing Beta-Thalassemia Trait from Iron Deficiency. *Pakistan Journal of Medical & Health Sciences*, 16(05):1225-1225.
- Shen, C., Jiang, Y.M., Shi, H., Liu, J.H., Zhou, W.J., Dai, Q.K. and Yang, H., 2010. Evaluation of indices in differentiation between iron deficiency anemia and β -thalassemia trait for Chinese children. *Journal of Pediatric Hematology/Oncology*, 32(6):218-222.
- Shine, I. and Lal, S. 1977. A strategy to detect β -thalassaemia minor. *The Lancet*, 309(8013):692-694.
- Sirdah, M., Al Mghari, K., Abuzaid, A.H. and Al Haddad, R.M., 2018. Should sex differences be considered when applying mathematical indices and formulas for discriminating β -thalassemia minor from iron deficiency?. *Practical Laboratory Medicine*, 11:1-9.
- Siswandari, W., Rujito, L., Indriani, V. and Djatmiko, W. 2019. Mentzer index diagnostic value in predicting thalassemia diagnosis. In *IOP Conference Series: Earth and Environmental Science*, 255(1):8-9
- Smits, N., 2010. A note on Youden's J and its cost ratio. *BMC Medical Research Methodology*, 10:1-4.
- Sproston, N.R. and Ashworth, J.J., 2018. Role of C-reactive protein at sites of inflammation and infection. *Frontiers in Immunology*, 9:754.
- Stiene-Martin, E.A., Lotspeich-Steininger, C.A. and Koepke, J.A. eds. 1998. *Clinical Hematology: Principles, Procedures, Correlations*. Lippincott Williams & Wilkins. pp:431-433
- Surapon, T. 2011. *Thalassemia Syndrome*. Advances in the Study of Genetic Disorders. InTech. pp: 43-48
- Surjawan, Y., Tan, H.L., Setiabudy, R.D. and Rositawati, W., 2017. Early screening of hemoglobinopathy in Indonesia using erythrocyte indices. *The Indonesian Biomedical Journal*, 9(2):99-105

- Tabassum, S., Khakwani, M., Fayyaz, A. and Taj, N., 2022. Role of Mentzer index for differentiating iron deficiency anemia and beta thalassemia trait in pregnant women. *Pakistan Journal of Medical Sciences*, 38(4Part-II):878.
- Tari, K., P. V. Ardalan, M. Abbaszadehdibavar, A. Atashi, A. Jalili, dan M. Gheidishahran. 2018. Thalassemia an update: molecular basis, clinical features and treatment. *International Journal of BioMedicine and Public Health*. 1(1):48-58
- Tassiopoulos, T., Konstantopoulos, K., Tassiopoulos, S., Rombos, Y., Alevizou-Terzaki, V., Kyriaki, P. and Loukopoulos, D. 1997. Erythropoietin levels and microcytosis in heterozygous beta-thalassaemia. *Acta aematologica*, 98(3):147-149.
- Thein SL. 2005. Genetic modifier of betathalassemia. *Hematologica*, 90(5):649-660.
- Unicef, U. and WHO, U., 2001. WHO: Iron deficiency anaemia: assessment, prevention, and control. A guide for programme managers.
- Urrechaga, E. 2008. Discriminant value of % microcytic/% hypochromic ratio in the differential diagnosis of microcytic anemia. *Clinical Chemistry and Laboratory Medicine*, 46(12):3-5
- Urrechaga, E., Aguirre, U. and Izquierdo, S., 2013. Multivariable discriminant analysis for the differential diagnosis of microcytic anemia. *Anemia*, 2013:3-8
- Urrechaga, E., Borque, L. and Escanero, J.F., 2011. The role of automated measurement of RBC subpopulations in differential diagnosis of microcytic anemia and β -thalassemia screening. *American journal of clinical pathology*, 135(3):374-379.
- Ulya, N.M., Indrawati, V.N., Wulansari, W.T., Lesmana, I. and Handayani, N.S.N., 2023. Mutation Spectrum of β -Globin Gene in Patients with β -Thalassemia at Tidar Hospital, Magelang, Central Java, Indonesia. *Hemoglobin*, 47(4):152-156.
- Vehapoglu, A., Ozgurhan, G., Demir, A.D., Uzuner, S., Nursoy, M.A., Turkmen, S. and Kacan, A., 2014. Hematological indices for differential diagnosis of Beta thalassemia trait and iron deficiency anemia. *Anemia*, 2014:11-14
- Vicinanza, P.A.O.L.O., Catalano, L.U.C.I.O., Franco, F.R.A.N.C.E.S.C.O., Vaccaro, E.M.I.L.I.A., Cancellario, S.E.R.G.I.O., Vicinanza, M.A.R.I.E.L.L.A., Andretta, C.L.A.U.D.I.A., Caputo, D.A.R.I.O., Pistolese, G.I.U.S.E.P.P.E. and Rotoli, B.R.U.N.O., 2002. Two New HDW-Based Indexes to Identify beta-Thalassemia Trait. *Laboratory Hematology*, 8:193-199.
- Viprakasit, V., Lee-Lee, C., Chong, Q.T., Lin, K.H. and Khuhapinant, A., 2009. Iron chelation therapy in the management of thalassemia: the Asian perspectives. *International Journal of Hematology*, 90:435-445.
- Wahidiyat, P.A., Sari, T.T., Rahmartani, L.D., Iskandar, S.D., Pratanata, A.M., Yapiy, I., Setianingsih, I., Atmakusuma, T.D. and Lubis, A.M. Thalassemia in Indonesia. 2022. *Hemoglobin*, 46(1):39-44.
- Walker, H.K., Hall, W.D. and Hurst, J.W., 1990. *Clinical methods: the history, physical, and laboratory examinations*. Boston: Butterworths.pp: 341-345

- Waye, J.S. and Eng, B., 2013. Diagnostic testing for α -globin gene disorders in a heterogeneous North American population. *International Journal of Laboratory Hematology*, 35(3):306-313.
- Weatherall, D.J., 2005. Keynote address: The challenge of thalassemia for the developing countries. *Annals of the New York Academy of Sciences*, 1054(1):11-17.
- Whittaker, P., 2016. *Iron Deficiency and Its Prevention*, Second Edi. ed, International Encyclopedia of Public Health. Elsevier.pp:233-235
- Wong, H.B. and Lim, G.H. 2011. Measures of diagnostic accuracy: sensitivity, specificity, PPV and NPV. *Proceedings of Singapore Healthcare*, 20(4):316-318.
- Yeh, J.S. and Cheng, C.H., 2005. Using hierarchical soft computing method to discriminate microcyte anemia. *Expert Systems with Applications*, 29(3):515-524.
- Youden, W.J., 1950. Index for rating diagnostic tests. *Cancer*, 3(1):32-35.
- Yeo, G., 1995. screening for beta-thalassaemia traits during pregnancy. *Singapore Medical Journal*, 36:615-618.