

REFERENCES

- Abdullah, U. Y., Jassim, H. M., Baig, A. A., Khorsheed, R. M., Al-Khayat, A. M., Sulong, A. F., ... & Yassin, W. A. (2015). Gallstones in patients with inherited hemolytic diseases. *Int J Pharm Pharm Sci*, 7(7), 9-15.
- Adewoyin, A. S. & Nwogoh, B. (2014). Peripheral blood film-a review. *Annals of Ibadan Postgraduate Medicine*, 12(2), 71-79.
- Allen, S. J., O'Donnell, A., Alexander, N. D., Mgone, C. S., Peto, T. E., Clegg, J. B., ... & Weatherall, D. J. (1999). Prevention of cerebral malaria in children in Papua New Guinea by southeast Asian ovalocytosis band 3. *The American Journal of Tropical Medicine and Hygiene*, 60(6), 1056-1060. <https://doi.org/10.4269/ajtmh.1999.60.1056>
- Almomani, E. Y., Chu, C. Y., & Cordat, E. (2011). Mis-trafficking of bicarbonate transporters: implications to human diseases. *Biochemistry and Cell Biology*, 89(2), 157-177. <http://dx.doi.org/10.1139/o10-153>
- Anwar, I. N. A. U., Hartini, S., & Prihandono, D. S. (2023). Overview of Giemsa, Wright and Wright-Giemsa Staining on Peripheral Blood Smear. *Mahakam Medical Laboratory Technology Journal*, 3(1).
- Ayogu, E. E., Ukwe, C. V., & Nna, E. O. (2016). Assessing the reliability of microscopy and rapid diagnostic tests in malaria diagnosis in areas with varying parasite density among older children and adult patients in Nigeria. *Journal of Postgraduate Medicine*, 62(3), 150. <https://doi.org/10.4103%2F0022-3859.183167>
- Baldwin, C., Pandey, J., & Olarewaju, O. (2020). Hemolytic anemia. *StatPearls* [Internet]. Treasure Island (FL): StatPearls Publishing. <https://www.ncbi.nlm.nih.gov/books/NBK558904/>
- Bauduer, F. (2013). Red cell polymorphisms and malaria: an evolutionary approach. *Bull Mem Soc Anthropol Paris*, 25, 55-64. <https://doi.org/10.1007/s13219-012-0060-8>
- Bertocchio, J. P., Genetet, S., Da Costa, L., Walsh, S. B., Knebelmann, B., Galimand, J., ... & Mouro-Chanteloup, I. (2020). Red blood cell AE1/band 3 transports in dominant distal renal tubular acidosis patients. *Kidney International Reports*, 5(3), 348-357. <https://doi.org/10.1016/j.kir.2019.12.020>
- Bolton-Maggs, P. H., Langer, J. C., Iolascon, A., Tittensor, P., & King, M. J. (2012). Guidelines for the diagnosis and management of hereditary spherocytosis–2011 update. *British Journal of Haematology*, 156(1), 37-49. <https://doi.org/10.1111/j.1365-2141.2011.08921.x>
- Czuba, L. C., Hillgren, K. M., & Swaan, P. W. (2018). Post-translational modifications of transporters. *Pharmacology & Therapeutics*, 192, 88-99. <https://doi.org/10.1016/j.pharmthera.2018.06.013>

- Da Costa, L., Galimand, J., Fenneteau, O., & Mohandas, N. (2013). Hereditary spherocytosis, elliptocytosis, and other red cell membrane disorders. *Blood Reviews*, 27(4), 167-178. <https://doi.org/10.1016/j.blre.2013.04.003>
- Dao, M., MacDonald, I., & Asaro, R. J. (2021). Erythrocyte flow through the interendothelial slits of the splenic venous sinus. *Biomechanics and Modeling in Mechanobiology*, 20, 2227-2245. <https://doi.org/10.1007%2Fs10237-021-01503-y>
- Deejai, N., Wisanuyotin, S., Nettuwakul, C., Khositseth, S., Sawasdee, N., Saetai, K., ... & Rungroj, N. (2019). Molecular diagnosis of solute carrier family 4 member 1 (SLC4A1) mutation-related autosomal recessive distal renal tubular acidosis. *Laboratory Medicine*, 50(1), 78-86. <https://doi.org/10.1093/labmed/lmy05>
- Dobkin, J., Wu, L., & Mangalmurti, N. S. (2023). The ultimate tradeoff: how red cell adaptations to malaria alter the host response during critical illness. *American Journal of Physiology-Lung Cellular and Molecular Physiology*, 324(2), L169-L178. <https://doi.org/10.1152/ajplung.00127.2022>
- Duez, J., Holleran, J. P., Ndour, P. A., Pionneau, C., Diakité, S., Roussel, C., ... & Buffet, P. A. (2015). Mechanical clearance of red blood cells by the human spleen: Potential therapeutic applications of a biomimetic RBC filtration method. *Transfusion Clinique et Biologique*, 22(3), 151-157. <https://dx.doi.org/10.1016/j.tracli.2015.05.004>
- Dunning, K., & Safo, A. O. (2011). The ultimate Wright-Giemsa stain: 60 years in the making. *Biotechnic & Histochemistry*, 86(2), 69-75. <https://doi.org/10.3109/10520295.2010.515496>
- Eladari, D., & Kumai, Y. (2015). Renal acid-base regulation: new insights from animal models. *Pflügers Archiv-European Journal of Physiology*, 467, 1623-1641. <https://doi.org/10.1007/s00424-014-1669-x>
- Eltoum, I., Fredenburgh, J., Myers, R. B., & Grizzle, W. E. (2001). Introduction to the theory and practice of fixation of tissues. *Journal of Histotechnology*, 24(3), 173-190. <https://doi.org/10.1179/his.2001.24.3.173>
- Ferreira, A., Marguti, I., Bechmann, I., Jeney, V., Chora, Â., Palha, N. R., ... & Soares, M. P. (2011). Sickle hemoglobin confers tolerance to Plasmodium infection. *Cell*, 145(3), 398-409. <https://doi.org/10.1016/j.cell.2011.03.049>
- Flatt, J. F., Stevens-Hernandez, C. J., Cogan, N. M., Eggleston, D. J., Haines, N. M., Heesom, K. J., ... & Bruce, L. J. (2020). Expression of SOUTH EAST ASIAN ovalocytic band 3 disrupts erythroblast cytokinesis and reticulocyte maturation. *Frontiers in Physiology*, 11, 357. <https://doi.org/10.3389/fphys.2020.00357>
- Garnett, C., & Bain, B. J. (2013). South-East Asian ovalocytosis. *American Journal of Hematology*, 88(4), 328-328. <https://doi.org/10.1002/ajh.23379>

- Gedde, M. M., Yang, E. U. N. G. Y. E. O. N. G., & Huestis, W. H. (1995). Shape response of human erythrocytes to altered cell pH.
- Geekiyangage, N. M., Balanant, M. A., Sauret, E., Saha, S., Flower, R., Lim, C. T., & Gu, Y. (2019). A coarse-grained red blood cell membrane model to study stomatocyte-discocyte-echinocyte morphologies. *PLoS One*, 14(4), e0215447. <https://doi.org/10.1371/journal.pone.0215447>
- Gistover, N., & Randolph, T. (2020). Comparison of Giemsa and Wright's Stain For Differential Analysis. *The FASEB Journal*, 34(S1), 1-1. <https://doi.org/10.1096/fasebj.2020.34.s1.06459>
- Golafshan, H. A., Ranjbaran, R., Kalantari, T., Moezzi, L., Karimi, M., Behzad-Behbahani, A., ... & Sharifzadeh, S. (2014). Evaluation of red cell membrane cytoskeletal disorders using a flow cytometric method in South Iran. *Turkish Journal of Hematology*, 31(1), 25. <https://doi.org/10.4274/tjh.2012.0146>
- Harris, N. J., Findlay, H. E., Simms, J., Liu, X., & Booth, P. J. (2014). Relative domain folding and stability of a membrane transport protein. *Journal of molecular biology*, 426(8), 1812-1825. <https://doi.org/10.1016/j.jmb.2014.01.012>
- Hoffbrand, A. V., Lewis, S. M., & Tuddenham, E. G. D. (1999). *Postgraduate Hematology* (4th ed.). Reed Educational and Professional Publishing Ltd.
- Inayatullah, A., Fatmawati, A., Emelda, E., & Abdurrahman Munir, M. (2022). Comparison of Real-Time PCR and Conventional PCR by Identifying Genomic DNA of Bovine and Porcine. *Jurnal Kimia Terapan Indonesia*.
- Joy, D. A., Feng, X., Mu, J., Furuya, T., Chotivanich, K., Krettli, A. U., ... & Su, X. Z. (2003). Early origin and recent expansion of Plasmodium falciparum. *science*, 300(5617), 318-321. <https://doi.org/10.1126/science.1081449>
- Kalakonda, A., Jenkins, B. A., & John, S. (2017). Physiology, bilirubin. *StatPearls* [Internet]. Treasure Island (FL): StatPearls Publishing. <https://www.ncbi.nlm.nih.gov/books/NBK470290/>
- Kalli, A. C., & Reithmeier, R. A. (2022). Organization and dynamics of the red blood cell band 3 anion exchanger SLC4A1: Insights from molecular dynamics simulations. *Frontiers in Physiology*, 13, 817945. <https://doi.org/10.3389%2Ffphys.2022.817945>
- Kimura, M., Soemantri, A., Siswanto, J. E., & Ishida, T. (2006). Ovalocytosis without band 3 gene 27-bp deletion and malaria infection. *Anthropological Science*, 114(2), 161-164. <https://doi.org/10.1537/ase.050802>
- Kotepui, K. U., Mahittikorn, A., Masangkay, F. R., & Kotepui, M. (2023). Association between ovalocytosis and Plasmodium infection: a systematic review and meta-analysis. *Scientific Reports*, 13(1), 7164. <https://doi.org/10.1038%2Fs41598-023-34170-3>
- Laosombat, V., Dissaneevate, S., Wongchanchailert, M., & Satayasevana, B. (2005). Neonatal anemia associated with Southeast Asian ovalocytosis. *International Journal of Hematology*, 82, 201-205. <https://doi.org/10.1532/ijh97.a20505>

- Lavinya, A. A., Razali, R. A., Razak, M. A., Mohamed, R., Moses, E. J., Soundararajan, M., ... & Yusoff, N. M. (2021). Homozygous Southeast Asian ovalocytosis in five live-born neonates. *Haematologica*, 106(6), 1758. <https://doi.org/10.3324/haematol.2020.268581>
- Lesesve, J. F., Garçon, L., & Lecompte, T. (2012). Finding knizocytes in a peripheral blood smear. *American Journal of Hematology*, 87(1), 105-106. <https://doi.org/10.1002/ajh.22007>
- Lewis, S. M., Bain, B. J., & Bates, I. (2006). *Practical Haematology* (10th ed.). Elsevier.
- Liu, S. C., Palek, J., Yi, S. J., Nichols, P. E., Derick, L. H., Chiou, S. S., ... & Golan, D. E. (1995). Molecular basis of altered red blood cell membrane properties in Southeast Asian ovalocytosis: role of the mutant band 3 protein in band 3 oligomerization and retention by the membrane skeleton. *Blood, The Journal of the American Society of Hematology*, 86(1), 349-358. <https://doi.org/10.1182/blood.V86.1.349.bloodjournal861349>
- Mirchev, R., Lam, A., & Golan, D. E. (2011). Membrane compartmentalization in Southeast Asian ovalocytosis red blood cells. *British Journal of Haematology*, 155(1), 111-121. <https://doi.org/10.1111%2Fbj.1365-2141.2011.08805.x>
- Mgone, C. S., Koki, G., Paniu, M. M., Kono, J., Bhatia, K. K., Genton, B., ... & Alpers, M. P. (1996). Occurrence of the erythrocyte band 3 (AE1) gene deletion in relation to malaria endemicity in Papua New Guinea. *Transactions of the Royal Society of Tropical Medicine and Hygiene*, 90(3), 228-231. [https://doi.org/10.1016/s0035-9203\(96\)90223-0](https://doi.org/10.1016/s0035-9203(96)90223-0)
- Mgone, C. S., Genton, B., Peter, W., Paniu, M. M., & Alpers, M. P. (1998). The correlation between microscopical examination and erythrocyte band 3 (AE1) gene deletion in south-east Asian ovalocytosis. *Transactions of the Royal Society of Tropical Medicine and Hygiene*, 92(3), 296-299. [https://doi.org/10.1016/S0035-9203\(98\)91019-7](https://doi.org/10.1016/S0035-9203(98)91019-7)
- Moreno-Castaño, A. B., Diaz-Ricart, M., Escolar, G., García, E., del Mar Mañú-Pereira, M., Idrizovic, A., ... & Merino, A. (2022). Southeast Asian ovalocytosis detected in a critical patient with COVID-19 pneumonia. *International Journal of Laboratory Hematology*. <https://doi.org/10.1111%2Fijlh.13878>
- Nixon, C. P., Satyagraha, A. W., Baird, G. L., Harahap, A. R., Panggalo, L. V., Ekawati, L. L., ... & Kevin Baird, J. (2018). Accurate light microscopic diagnosis of South-East Asian ovalocytosis. *International Journal of Laboratory Hematology*, 40(6), 655-662. <https://doi.org/10.1111%2Fijlh.12900>
- Palazzo, V., Provenzano, A., Becherucci, F., Sansavini, G., Mazzinghi, B., Orlandini, V., ... & Giglio, S. (2017). The genetic and clinical spectrum of a large cohort of patients with distal renal tubular acidosis. *Kidney International*, 91(5), 1243-1255. <https://doi.org/10.1016/j.kint.2016.12.017>
- Picard, V., Proust, A., Eveillard, M., Flatt, J. F., Couec, M. L., Caillaux, G., ... & Thomas, C. (2014). Homozygous Southeast Asian ovalocytosis is a severe dyserythropoietic anemia associated

- with distal renal tubular acidosis. *Blood, The Journal of the American Society of Hematology*, 123(12), 1963-1965. <https://doi.org/10.1182/blood-2014-01-548149>
- Sabeti, P. C. (2008). Natural selection: Uncovering mechanisms of evolutionary adaptation to infectious disease. *Nature Education*, 1(1), 13.
- Safeukui, I., Buffet, P. A., Deplaine, G., Perrot, S., Brousse, V., Sauvanet, A., ... & Mohandas, N. (2018). Sensing of red blood cells with decreased membrane deformability by the human spleen. *Blood Advances*, 2(20), 2581-2587. <https://doi.org/10.1182%2Fbloodadvances.2018024562>
- Schlessinger, A., Khuri, N., Giacomini, K. M., & Sali, A. (2013). Molecular modeling and ligand docking for solute carrier (SLC) transporters. *Current Topics in Medicinal Chemistry*, 13(7), 843-856. <https://doi.org/10.2174/1568026611313070007>
- Silva, R., Amarasinghe, D., Perera, S., & Premawardhena, A. (2022). A Systematic review on diagnostic methods of red cell membrane disorders in Asia. *International Journal of Laboratory Hematology*, 44(2), 248-262. <https://doi.org/10.1111/ijlh.13800>
- Tse, W. T., & Lux, S. E. (2005). Red blood cell membrane disorders. *British journal of haematology*, 104(1), 2-13. <https://doi.org/10.1111/j.1365-2141.1999.01130.x>
- Wilder, J. A., Stone, J. A., Preston, E. G., Finn, L. E., Ratcliffe, H. L., & Sudoyo, H. (2009). Molecular population genetics of SLC4A1 and Southeast Asian Ovalocytosis. *Journal of human genetics*, 54(3), 182-187. <https://doi.org/10.1038/jhg.2009.12>
- Wrong, O., Bruce, L. J., Unwin, R. J., Toye, A. M., & Tanner, M. J. (2002). Band 3 mutations, distal renal tubular acidosis, and Southeast Asian ovalocytosis. *Kidney International*, 62(1), 10-19. <https://doi.org/10.1046/j.1523-1755.2002.00417.x>
- Yamsri, S., Kawon, W., Duereh, A., Fucharoen, G., & Fucharoen, S. (2021). Southeast Asian ovalocytosis and hemoglobinopathies in newborns: Prevalence, molecular, and hematologic analyses. *Journal of Pediatric Hematology/Oncology*, 43(3), e341-e345. <https://doi.org/10.1097/mpo.0000000000001920>
- Yang, M., Sheng, Q., Ge, S., Song, X., Dong, J., Guo, C., & Liao, L. (2023). Mutations and clinical characteristics of dRTA caused by SLC4A1 mutations: Analysis based on published patients. *Frontiers in Pediatrics*, 11, 1077120. <https://doi.org/10.3389/fped.2023.1077120>
- Yenchitsomanus, P. T., Kittanakom, S., Rungroj, N., Cordat, E., & Reithmeier, R. A. (2005). Molecular mechanisms of autosomal dominant and recessive distal renal tubular acidosis caused by SLC4A1 (AE1) mutations. *Journal of Molecular and Genetic Medicine: An International Journal of Biomedical Research*, 1(2), 49. <https://doi.org/10.4172%2F1747-0862.1000013>
- Yusoff, N. M., Van Rostenberghe, H., Shirakawa, T., Nishiyama, K., Amin, N., Darus, Z., ... & Matsuo, M. (2003). High prevalence of Southeast Asian ovalocytosis in Malays with distal renal tubular acidosis. *Journal of Human Genetics*, 48(12), 650-653. <https://doi.org/10.1007/s10038-003-0095-2>

Zhang, Y., Wang, Z., Wang, W., Yu, H., & Jin, M. (2022). Applications of polymerase chain reaction-based methods for the diagnosis of plague. *Experimental and Therapeutic Medicine*, 24(2), 1-10. <https://doi.org/10.3892/etm.2022.11438>