References and Further Reading

1. Sarker IH. Machine Learning: Algorithms, Real-World Applications and Research Directions. SN Comput Sci. 2021;2(3):160. doi: 10.1007/s42979-021-00592-x. Epub 2021 Mar 22. PMID: 33778771; PMCID: PMC7983091.

2. Çubukçu HC, Topcu Dİ, Yenice S. Machine learning-based clinical decision support using laboratory data. Clin Chem Lab Med. 2023 Nov 29. doi: 10.1515/cclm-2023-1037. Epub ahead of print. PMID: 38015744.

3. Salama, W.M., Aly, M.H. & Amer, E.S. Deep learning based BER improvement for NOMA-VLC systems with perfect and imperfect successive interference cancellation. Opt Quant Electron 55, 692 (2023). https://doi.org/10.1007/s11082-023-04988-2

4. Rabbani N, Kim GYE, Suarez CJ, Chen JH. Applications of machine learning in routine laboratory medicine: Current state and future directions. Clin Biochem. 2022 May;103:1-7. doi: 10.1016/j.clinbiochem.2022.02.011. Epub 2022 Feb 25. PMID: 35227670; PMCID: PMC9007900.

5. Master SR, Badrick TC, Bietenbeck A, Haymond S. Machine Learning in Laboratory Medicine: Recommendations of the IFCC Working Group. Clin Chem. 2023 Jul 5;69(7):690-698. doi: 10.1093/clinchem/hvad055. PMID: 37252943; PMCID: PMC10320011.

6. Çubukçu, Hikmet Can. "Performance evaluation of internal quality control rules, EWMA, CUSUM, and the novel machine learning model" Turkish Journal of Biochemistry, vol. 46, no. 6, 2021, pp. 661-670. https://doi.org/10.1515/tjb-2021-0199

7. Topcu Dİ, Bayraktar N. Searching for the urine osmolality surrogate: an automated machine learning approach. Clin Chem Lab Med. 2022 Jul 4;60(12):1911-1920. doi: 10.1515/cclm-2022-0415. PMID: 35778953.

8. Maryam Saberi Karimian, Zahra, Khorasanchi, Hamideh Ghazizadeh, Maryam Tayefi, Sara Saffar, Gordon A. Ferns & Majid Ghayour-Mobarhan (2021) Potential value and impact of data mining and machine learning in clinical diagnostics, Critical Reviews in Clinical Laboratory Sciences, 58:4, 275-296, DOI: 10.1080/10408363.2020.1857681

9. Chabrun F, Dieu X, Ferre M, Gaillard O, Mery A, Chao de la Barca JM, Taisne A, Urbanski G, Reynier P, Mirebeau-Prunier D. Achieving Expert-Level Interpretation of Serum Protein Electrophoresis through Deep Learning Driven by Human Reasoning. Clin Chem. 2021 Oct 1;67(10):1406-1414. doi: 10.1093/clinchem/hvab133. PMID: 34491313.

10. Wang H, Wang H, Zhang J, Li X, Sun C, Zhang Y. Using machine learning to develop an autoverification system in a clinical biochemistry laboratory. Clin Chem Lab Med. 2020 Nov 26;59(5):883-891. doi: 10.1515/cclm-2020-0716. PMID: 33554565.

11. https://www.fda.gov/medical-devices/software-medical-device-samd/artificial-intelligence-and-machine-learning-aiml-enabled-medical-devices

12. Allen, M.R., Webb, S., Mandvi, A. et al. Navigating the doctor-patient-AI relationship - a mixed-methods study of physician attitudes toward artificial intelligence in primary care. BMC Prim. Care 25, 42 (2024). https://doi.org/10.1186/s12875-024-02282-y

13. Joshi G, Jain A, Araveeti SR, Adhikari S, Garg H, Bhandari M. FDA-Approved Artificial Intelligence and Machine Learning (AI/ML)-Enabled Medical Devices: An Updated Landscape. Electronics. 2024; 13(3):498. https://doi.org/10.3390/electronics13030498

14. Livia Faes, Xiaoxuan Liu, Siegfried K. Wagner, Dun Jack Fu, Konstantinos Balaskas, Dawn A. Sim, Lucas M. Bachmann, Pearse A. Keane, Alastair K. Denniston; A Clinician's Guide to Artificial Intelligence: How to Critically Appraise Machine Learning Studies. Trans. Vis. Sci. Tech. 2020;9(2):7. https://doi.org/10.1167/tvst.9.2.7.

15. Çubukçu HC, Topcu Dİ, Bayraktar N, Gülşen M, Sarı N, Arslan AH. Detection of COVID-19 by Machine Learning Using Routine Laboratory Tests. Am J Clin Pathol. 2022 May 4;157(5):758-766. doi: 10.1093/ajcp/aqab187. PMID: 34791032; PMCID: PMC8690000.

16. Coskun A, Lippi G. Personalized laboratory medicine in the digital health era: recent developments and future challenges. Clin Chem Lab Med. 2023 Sep 28;62(3):402-409. doi: 10.1515/cclm-2023-0808. PMID: 37768883.

17. Yang, Guang & Ye, Qinghao & Xia, Jun. (2021). Unbox the Black-box for the Medical Explainable AI via Multi-modal and Multi-centre Data Fusion: A Mini-Review, Two Showcases and Beyond.

18. Ueda, D., Kakinuma, T., Fujita, S. et al. Fairness of artificial intelligence in healthcare: review and recommendations. Jpn J Radiol 42, 3–15 (2024). https://doi.org/10.1007/s11604-023-01474-3

19. Obermeyer Z, Powers B, Vogeli C, Mullainathan S. Dissecting racial bias in an algorithm used to manage the health of populations. Science. 2019 Oct 25;366(6464):447-453. doi: 10.1126/science.aax2342. PMID: 31649194.

20. Derraz, B., Breda, G., Kaempf, C., Baenke, F., Cotte, F., Reiche, K., Köhl, U., Kather, J. N., Eskenazy, D., & Gilbert, S. (2024). New regulatory thinking is needed for AI-based personalised drug and cell therapies in precision oncology. Npj Precision Oncology, 8(1), 23. https://doi.org/10.1038/s41698-024-00517-w

21. Shi, Y., Li, R. X., Shao, W. Q., Duan, X. C., Ye, H. J., Zhan, D. C., Pan, B. S., Wang, B. L., Guo, W., & Jiang, Y. (2023). A Multi-task Method for Immunofixation Electrophoresis Image Classification. Lecture Notes in Computer Science (Including Subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 14225 LNCS(October), 148–158. https://doi.org/10.1007/978-3-031-43987-2_15

22. Master, S. R., & Haymond, S. (2023). Do You See What I See? Automated IFE Interpretation Using Machine Learning. Clinical Chemistry, 69(2), 113–115. https://doi.org/10.1093/clinchem/hvac202

23. Haymond, S., & Master, S. R. (2022). How Can We Ensure Reproducibility and Clinical Translation of Machine Learning Applications in Laboratory Medicine? Clinical Chemistry, 68(3), 392–395. https://doi.org/10.1093/clinchem/hvab272

24. Topcu, D. Í. (2023). Developing Data-Centric Clinical Laboratory Workflow Through the Use of Open-Source Tools. Journal of Applied Laboratory Medicine, 8(1), 7–10. https://doi.org/10.1093/jalm/jfac110

25. https://iris.who.int/handle/10665/341996, https://www.unesco.org/en/artificial-intelligence/recommendation-ethics

26. https://medium.com/@jetnew/a-summary-of-alan-m-turings-computing-machinery-and-intelligence-fd714d187c0b

27. https://transformainsights.com/ai-machine-learning

28. https://www.fda.gov/medical-devices/software-medical-device-samd/artificial-intelligence-and-machine-learning-aiml-enabled-medical-devices