

Editorial

Artificial Intelligence in Biochemical Analysis

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Recently, artificial intelligence (AI) has become a powerful technique in biochemical science, enabling an extensive approach in disease prediction, automation of data interpretation, and sensitive diagnostic, which facilitates the disease progression, treatment response, and patient outcomes [1]. More importantly, these trends have now taken hold of a wide range of advantages, including enabling faster, sensitive, and complex biochemical data interpretation by the integration of AI tools of deep learning (DL) and machine learning (ML). Another pressing issue is AI models in the detection of biochemical targets, like proteins, metabolites, and pathogens, using state-of-the-art AI platforms; predicted biosensors and microspheres facilitate the testing using modern portable smartphones and devices [2].

Although AI has potential in healthcare research advantages, it still struggles with significant challenges; for instance, the integration of AI with traditional biochemical methods, the deficiency of standardized data formats, and the ethical considerations tied to AI-driven research approaches [3].

In conclusion, the future of AI in biochemical analysis fabrications holds bright prospects for collaboration between computational intelligence and human knowledge by reducing the time and

cost associated with experimental measurements to make it smarter, faster, and more predictive for future usages. Journals should require full details about the next generation of precision biochemical analyses and software using AI, not only for technological innovation publishing but also for sustainable progress in clinical practice and human care.

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