Clinical Case Reports and Clinical Practice

Open Access

REVIEW ARTICLE

Volume 1 - Issue 3

# AI and Machine Learning: Catalysts for Transformation in Medical Diagnostics and Treatment

Patrik James Kennet[1*], and Soren Falkner[2]

[1] Massachusetts Institute of Technology, Massachusetts Ave, Cambridge, United States
[2] Vienna University of Technology, Faculty Of Computer Engineering, Vienna, Austria.

***Corresponding author:** Patrik James Kennet, Massachusetts Institute of Technology, Massachusetts Ave, Cambridge, United States

**Received:** 08 September, 2025 | **Accepted:**12 September, 2025 | **Published:** 12 May , 2026

**Citation:** Patrik James Kennet, Soren Falkner, (2026) Massachusetts Institute of Technology, Massachusetts Ave, Cambridge, United States J. Clinical Case Reports and Clinical Practice 1(3): dx.doi.org/CCRCP/PP.0010



## Abstract

The integration of artificial intelligence (AI) and machine learning (ML) has become a transformative force in modern medicine, fundamentally reshaping how diseases are diagnosed and treated. These technologies leverage sophisticated algorithms to analyze vast and complex datasets including medical images, genomic information, and electronic health records—to uncover patterns and insights that may be imperceptible to human analysis. In diagnostics, AI-powered systems are demonstrating remarkable accuracy in identifying abnormalities, such as detecting early signs of cancer in radiological scans or diagnosing eye diseases from retinal images. This capability not only improves diagnostic precision but also enables earlier intervention, which is critical for positive patient outcomes. Furthermore, AI is accelerating the drug discovery process by identifying promising new compounds and optimizing clinical trial design, significantly reducing the time and cost associated with bringing new therapies to market. While these advancements hold immense promise, challenges related to data privacy, algorithmic bias, and the need for robust regulatory frameworks remain crucial areas of focus for the future.

**Keywords:** artificial intelligence, machine learning, medical diagnostics, personalized medicine, treatment planning, drug discovery, healthcare, deep learning, predictive analytics, clinical decision support.

## Introduction

The history of medicine is a testament to humanity's relentless pursuit of better health and longer life. From the discovery of antibiotics to the mapping of the human genome, each era has been defined by a breakthrough technology that has fundamentally altered clinical practice. We are now at the threshold of a new revolution, one driven not by a single drug or device, but by a paradigm shift in how we process and understand information. The convergence of artificial intelligence (AI) and machine learning (ML) with the vast, complex world of healthcare data is ushering in an era where diagnostics are more precise, treatments are more personalized, and the very act of healing is becoming an intricate dance between human expertise and algorithmic insight[1-23].

The healthcare industry has traditionally been data-rich but insight-poor. Hospitals and clinics generate massive volumes of information daily, from electronic health records (EHRs) and medical imaging to patient-reported outcomes and genomic sequencing data. Yet, the sheer scale and complexity of this data have often exceeded the capacity of human analysis, leaving a wealth of potentially life-saving knowledge untapped. This is where AI and ML have emerged as transformative catalysts. At their core, these technologies are powerful pattern recognition engines. They can be trained on enormous datasets to identify subtle correlations, predict future outcomes, and automate complex tasks with a speed and accuracy that were once unimaginable. For instance, a radiologist may review hundreds of medical scans in a week, but an AI system can analyze millions of images to detect minute anomalies that could be the earliest indicators of disease, long before they become visible to the human eye. This capability is not about replacing human experts but augmenting their skills, freeing them from repetitive tasks to focus on the most complex and critical aspects of patient care[24-35].

### Redefining Diagnostics: From Reactive to Predictive Healthcare

One of the most immediate and profound impacts of AI in medicine is in the field of diagnostics. The traditional diagnostic process is often reactive a patient presents with symptoms, and a series of tests are conducted to identify the underlying cause. AI is shifting this model toward a more proactive, predictive approach. For example, in oncology, deep learning models are being trained on millions of histopathology slides to identify cancerous cells with accuracy that rivals, and in some cases surpasses, that of experienced pathologists. Similarly, in ophthalmology, AI algorithms can analyze retinal images to detect early signs of diabetic retinopathy, a leading cause of blindness, enabling timely intervention and preventing vision loss.

Beyond image analysis, AI is transforming how we interpret a patient's complete health profile. By integrating data from EHRs, wearable devices, and genetic information, ML models can calculate a patient's risk of developing chronic diseases like diabetes or heart disease years in advance. This predictive power allows clinicians to intervene with preventive measures, such as lifestyle changes or targeted screening programs, long before symptoms manifest. This represents a fundamental shift in healthcare philosophy, moving from treating sickness to maintaining wellness.

### The Promise of Personalized Treatment and Drug Discovery

While the diagnostic applications of AI have garnered significant attention, the technology's influence on treatment is perhaps even more revolutionary. The concept of personalized medicine tailoring medical decisions and treatments to the individual patient is no longer a theoretical ideal but a practical reality made possible by AI. By analyzing a patient’s specific genomic data, medical history, and even their lifestyle, AI models can predict how they will respond to different medications. This helps clinicians select the most effective drug and dosage for each person, minimizing adverse side effects and maximizing therapeutic benefits. For patients with cancer, for example, AI can help identify the specific mutations driving their tumor's growth, allowing for the prescription of targeted therapies that are more effective and less toxic than traditional chemotherapy[36-48].

Furthermore, AI is poised to dramatically accelerate the slow and costly process of drug discovery. Traditionally, developing a new drug from concept to market can take over a decade and cost billions of dollars. AI can significantly expedite this process by analyzing vast chemical libraries to identify promising new compounds, predicting their efficacy and toxicity, and optimizing their structure for therapeutic effect. AI-powered simulations can also model how a drug will interact with the human body, reducing the need for costly and time-consuming laboratory experiments. This newfound efficiency holds the potential to unlock new treatments for diseases that have long remained a mystery. While significant challenges—from ensuring data privacy and addressing algorithmic bias to establishing robust regulatory frameworks—remain, the trajectory is clear. AI is not merely an incremental improvement; it is a fundamental restructuring of the medical landscape, promising a future where healthcare is more precise, more predictive, and more personal than ever before[49-60].

## Challenges:

While the potential of AI and machine learning in medicine is immense, the journey from promise to widespread, safe implementation is fraught with significant challenges. These hurdles are not merely technical; they are deeply rooted in ethical, legal, and operational complexities that must be addressed to ensure patient trust and safety.



**Citation:** Patrik James Kennet, Soren Falkner, (2026) Massachusetts Institute of Technology, Massachusetts Ave, Cambridge, United States J. Clinical Case Reports and Clinical Practice 1(3): dx.doi.org/CCRCP/PP.0010

## 1. Data-Related Challenges

- **Data Availability and Quality:** AI models are only as good as the data they are trained on. Accessing large, high-quality, and diverse medical datasets is a major barrier. Data is often fragmented across different healthcare systems, stored in varying formats, and contains inconsistencies. Furthermore, the sensitive nature of health information makes data sharing difficult, hindering the creation of the massive datasets required for effective deep learning.
- **Algorithmic Bias:** This is one of the most critical and widely discussed challenges. If the data used to train an AI model is not representative of the entire population—for example, if it is skewed toward a specific race, gender, or socioeconomic group—the model will learn and perpetuate these biases. This could lead to a system that performs poorly or makes incorrect diagnoses for marginalized populations, exacerbating existing health disparities.

## 2. Ethical and Trust-Related Challenges

- **The "Black Box" Problem:** Many of the most powerful AI models, particularly deep learning neural networks, are "black boxes." Their decision-making processes are so complex that even their creators cannot fully explain how they arrived at a particular conclusion. In a field like medicine, where a doctor must be able to explain the reasoning behind a diagnosis or treatment plan, this lack of transparency is a significant hurdle. Gaining the trust of both clinicians and patients requires a move toward more "explainable AI" (XAI).
- **Accountability and Liability:** When an AI system makes an error that leads to patient harm, who is at fault? Is it the physician who used the tool, the AI developer, the healthcare institution, or the algorithm itself? Current legal and ethical frameworks are not well-equipped to handle these new questions of liability. Clear guidelines are needed to define roles and responsibilities to protect both patients and healthcare professionals.
- **Patient Consent and Privacy:** The use of vast amounts of patient data for AI development raises profound privacy concerns. While regulations like HIPAA in the U.S. and GDPR in Europe provide some protection, AI's ability to re-identify anonymized data or infer sensitive information from seemingly non-sensitive data sources is a growing risk. Ensuring patients understand how their data will be used and giving them the ability to provide truly informed consent is a complex and ongoing challenge[61-63].

## 3. Regulatory and Integration Challenges

- **Lack of Clear Regulatory Frameworks:** AI in medicine is evolving faster than regulatory bodies can keep up. Unlike a new drug or medical device that has a clear approval pathway, AI software and algorithms often fall into a regulatory gray area. The U.S. FDA, for example, is developing new frameworks for "Software as a Medical Device" (SaMD) and for AI/ML-based products that can continuously learn and adapt, but a global, unified standard is still a long way off.
- **Integration into Clinical Workflow:** AI tools must be seamlessly integrated into the daily workflow of busy clinicians. If a tool is difficult to use, requires a steep learning curve, or doesn't fit into existing systems, it will face resistance and low adoption rates. The technology must be designed to enhance, not disrupt, the physician-patient relationship.
- **Training and Education:** The next generation of healthcare professionals must be trained to work alongside AI. Medical schools and residency programs need to incorporate curricula on data literacy, AI principles, and how to critically evaluate and use AI-powered tools responsibly. The risk of "automation bias," where a clinician overly relies on an AI's recommendation and fails to use their own judgment, is a real concern that requires specific training to mitigate.

## Future Works:

Future works for AI and machine learning in medicine will focus on moving beyond current applications to tackle more complex, holistic, and integrated challenges. The next wave of innovation will address the limitations of today's systems and push the boundaries of what's possible, from personalized treatment to the integration of AI with other cutting-edge technologies.

## 1. Integration and Multi-Modal AI

Future AI systems won't be limited to a single task, like analyzing a single X-ray. Instead, they'll become multi-modal, seamlessly integrating and analyzing data from diverse sources to provide a more comprehensive view of a patient's health. This includes combining:

- **Genomic data:** Analyzing a person's DNA to understand their genetic predispositions.
- **Medical imaging:** Interpreting CT scans, MRIs, and pathology slides.
- **Electronic Health Records (EHRs):** Reviewing a patient's full medical history, from lab results to medication lists.



**Citation:** Patrik James Kennet, Soren Falkner, (2026) Massachusetts Institute of Technology, Massachusetts Ave, Cambridge, United States J. Clinical Case Reports and Clinical Practice 1(3): dx.doi.org/CCRCP/PP.0010

- **Wearable device data:** Continuous, real-time monitoring of vitals like heart rate and sleep patterns.

By synthesizing these data streams, AI will create a digital twin of the patient, allowing for incredibly precise predictions and personalized interventions. This will move healthcare from a reactive model treating illness after it appears to a proactive and preventative one.

### 2. Advancements in Drug Discovery and Personalized Medicine

AI is already making strides in drug discovery, but future work will make the process even faster and more targeted. Researchers will use AI to:

- **Generate new molecular structures:** Instead of just screening existing compounds, generative AI will be able to design novel molecules from scratch, specifically tailored to target a disease.
- **Simulate clinical trials:** AI models will simulate how a drug will perform in a diverse patient population, significantly reducing the time and cost of real-world trials.
- **Develop "hyper-personalized" therapies:** The goal is to move beyond general drug recommendations to therapies that are customized to a patient's unique genetic profile and disease characteristics, minimizing side effects and maximizing efficacy.

This includes using AI to better understand protein folding, which is a crucial step in understanding disease mechanisms and designing new drugs.

### 3. The Role of Generative AI and Quantum Computing

Generative AI, like Large Language Models (LLMs), will have a profound impact on the healthcare workflow. Future applications will include:

- **Automated clinical documentation:** AI will listen to doctor-patient conversations in real-time and automatically generate clinical notes, freeing up physicians to focus on the patient.
- **Enhanced medical education:** Generative AI can create interactive simulations and virtual patients for training, providing medical students with hands-on experience in a safe environment.
- **Patient-facing chatbots:** AI-powered virtual assistants will provide round-the-clock support for patients, answering questions, managing appointments, and providing personalized health advice.

## Conclusion:

The advent of artificial intelligence and machine learning in medicine is not merely an incremental technological upgrade; it represents a fundamental reshaping of healthcare's landscape. The shift from a reactive, one-size-fits-all approach to a proactive, personalized, and predictive model holds the potential to solve some of the most pressing challenges in global health. From democratizing access to care in underserved regions to accelerating the discovery of life-saving drugs, AI is poised to enhance clinical decision-making and empower both patients and providers.

However, the realization of this future is contingent on a concerted effort to address the significant ethical, legal, and operational challenges that accompany this powerful technology. The critical issues of algorithmic bias, data privacy, and the "black box" problem demand a commitment to explainable AI (XAI) and the creation of robust, transparent regulatory frameworks. The future success of medical AI will hinge on our ability to build systems that not only perform with high accuracy but also inspire trust and accountability among clinicians and patients.

## References:


1. O. Panahi. (2025). Nanomedicine: Tiny Technologies, Big Impact on Health. *Journal of Bio-Med and Clinical Research. RPC Publishers*.2(1);
2. O. Panahi. (2025). The Age of Longevity: Medical Advances and The Extension of Human Life. *Journal of Bio-Med and Clinical Research.RPC Publishers*. 2(1);
3. Panahi O. Predictive Health in Communities: Leveraging AI for Early Intervention and Prevention. Ann Community Med Prim Health Care. 2025; 3(1): 1027.
4. Panahi, O. (2025). Digital Health Equity: Leveraging IT and AI for Community Well-being. *Ann Community Med Prim Health Care*, *3*(1), 1028.




**Citation:** Patrik James Kennet, Soren Falkner, (2026) Massachusetts Institute of Technology, Massachusetts Ave, Cambridge, United States J. Clinical Case Reports and Clinical Practice 1(3): dx.doi.org/CCRCP/PP.0010

5. Koyuncu, B., Gokce, A., & Panahi, P. (2015, November). The use of the Unity game engine in the reconstruction of an archeological site. In 19th Symposium on Mediterranean Archaeology (SOMA 2015) (pp. 95–103).
6. Koyuncu, B., Meral, E., & Panahi, P. (2015). Real time geolocation tracking by using GPS+GPRS and Arduino based SIM908. IFRSA International Journal of Electronics Circuits and Systems (IIJECS), 4(2), 148–150.
7. Koyuncu, B., Uğur, B., & Panahi, P. (2013). Indoor location determination by using RFIDs. International Journal of Mobile and Adhoc Network (IJMAN), 3(1), 7–11.
8. Omid Panahi. The Impact of Artificial Intelligence in Medical Diagnosis. Int J Nurs Health Care. (2025). 2(1):1-4.
9. Omid Panahi. The AI Revolution in Healthcare. Int J Nurs Health Care. 2025; 2(1):1-4.
10. Omid Panahi. Beyond the Bedside: How Future Tech is Revolutionizing Medical Care. Int J Nurs Health Care. (2025). 2(1):1-4.
11. Panahi, O. (2025). Secure IoT for Healthcare. European Journal of Innovative Studies and Sustainability, 1(1), 17-23. https://doi.org/10.59324/ejiss.2025.1(1).03.
12. Omid Panahi. The Algorithmic Clinician: AI's Transformative Role in Modern Medicine. Int J Nurs Health Care. (2025). 2(1):1-4.
13. Omid Panahi* and Zahra Shahbazpour. Healthcare Reimagined: AI and the Future of Clinical Practice. Am J Biomed Sci & Res. (2025). 27(6) AJBSR.MS.ID.003617,
14. Panahi O. (2025). Smart Implants: Integrating Sensors and Data Analytics for Enhanced Patient Care. Dental. 7(1):22.
15. Kevin Thamson, Omid Panahi (2025). Bridging the Gap: AI as a Collaborative Tool Between Clinicians and Researchers. J. of Bio Adv Sci Research, 1(2):1-08. WMJ/JBASR-112.
16. Kevin Thamson, Omid Panahi (2025). Challenges and Opportunities for Implementing AI in Clinical Trials. J. of Bio Adv Sci Research, 1(2):1-08. WMJ/JBASR-113.
17. Kevin Thamson, Omid Panahi (2025). Ethical Considerations and Future Directions of AI in Dental Healthcare. J. of Bio Adv Sci Research, 1(2):1-07. WMJ/JBASR-114.
18. Kevin Thamson, Omid Panahi (2025). Bridging the Gap: AI, Data Science, and Evidence-Based Dentistry. J. of Bio Adv Sci Research, 1(2):1-13. WMJ/JBASR-115.
19. Omid Panahi, Mohammad Zeinalddin (2025). The Future of Orthodontics: AI-Powered Diagnosis and Treatment. J. of Bio Adv Sci Research, 1(2):1-07. WMJ/JBASR-116.
20. Omid Panahi, Mohammad Zeinalddin (2025). The Digital Smile: How AI is Revolutionizing Orthodontics. J. of Bio Adv Sci Research, 1(2):1-06. WMJ/JBASR-117.
21. O. Panahi. (2025). Deep Learning in Diagnostics, Journal of Medical Discoveries, 2(1);
22. O. Panahi. (2025). Algorithmic Medicine, Journal of Medical Discoveries, 2(1);
23. Panahi, O., Rezaei, S., Marzi, M., & Sana, F. A. (2011c). Helicobacter pylori & oral cavity inflammation. Journal of Pharmaceutical and Clinical Sciences, 2, 13–15.
24. Dr. Omid Panahi. Forging a Healthier Future Through Responsible AI in Families and Communities. Archives of Community and Family Medicine. (2025). 8(1): 21-30.
25. Panahi O. (2025). Smart Implants: Integrating Sensors and Data Analytics for Enhanced Patient Care. Dental. 7(1):22.
26. Omid P. (2011). Relevance between gingival hyperplasia and leukemia. Int J Acad Res. 3: 493–449.
27. Panahi O. The Future of Healthcare: AI, Public Health and the Digital Revolution. Medi Clin Case Rep J (2025).3(1):763-766.
28. Panahi, P., Maragheh, H. K., Abdolzadeh, M., & Sharifi, M. (2008, September). A novel schema for multipath video transferring over ad hoc networks. In 2008 The Second International Conference on Mobile Ubiquitous Computing, Systems, Services and Technologies (pp. 77–82).
29. Omid P. Empowering Dental Public Health: Leveraging Artificial Intelligence for Improved Oral Healthcare Access and Outcomes. JOJ Pub Health. (2024). 9(1): 555754.
30. Omid Panahi. "AI: A New Frontier in Oral and Maxillofacial Surgery". Acta Scientific Dental Sciences 8.6 (2024). 40-42.
31. Omid P, Evil Farrokh E. Beyond the Scalpel: AI, Alternative Medicine, and the Future of




**Citation:** Patrik James Kennet, Soren Falkner, (2026) Massachusetts Institute of Technology, Massachusetts Ave, Cambridge, United States J. Clinical Case Reports and Clinical Practice 1(3): dx.doi.org/CCRCP/PP.0010

Personalized Dental Care. J Complement Med Alt Healthcare. (2024). 13(2): 555860.
32. Panahi, O., & Farrokh, S. (2025). The use of machine learning for personalized dental-medicine treatment. Global Journal of Medical and Biomedical Case Reports, 1, 001.
33. Panahi O. AI in Surgical Robotics: Case Studies. Austin J Clin Case Rep. (2024). 11(7): 1342.
34. Panahi O, Zeinaldin M. Digital Dentistry: Revolutionizing Dental Care. J Dent App. 2024; 10 (1):1121.
35. Panahi O, et al. (2025). Smart Robotics for Personalized Dental Implant Solutions. Dental. 7(1):21.
36. Panahi, O, Arab, M. S, Tamson, K. M. (2011). GINGIVAL ENLARGMENT AND RELEVANCE WITH LEUKEMIA. International Journal of Academic Research. 3(2).
37. Panahi O. The evolving partnership: surgeons and robots in the maxillofacial operating room of the future. J Dent Sci Oral Care. (2025).1(1):1–7.
38. Omid Panahi, Sevil Farrokh. Building Healthier Communities: The Intersection of AI, IT, and Community Medicine. Int J Nurs Health Care. (2025). 1(1):1-4.
39. Panahi, D. U., & HOC, A. (2025). Networks: Applications. *Challenges, Future Directions, Scholars' Press, ISBN*, 978-3.
40. Omid Panahi (2024). Teledentistry: Expanding Access to Oral Healthcare. Journal of Dental Science Research Reviews & Reports. SRC/JDSR-203.
41. Omid P, Reza S. How Artificial Intelligence and Biotechnology are Transforming Dentistry. Adv Biotech & Micro. (2024). 18(2): 555981.
42. Omid Panahi*and Reza Safaralizadeh. AI and Dental Tissue Engineering: A Potential Powerhouse for Regeneration. Mod Res Dent. 8(2). MRD. 000682. 2024.
43. Omid P. Artificial Intelligence in Oral Implantology, Its Applications, Impact and Challenges. Adv Dent & Oral Health. (2024). 17(4): 555966.
44. O. Panahi. (2025). Algorithmic Medicine, Journal of Medical Discoveries, 2(1);
45. O. Panahi. (2025). Deep Learning in Diagnostics, Journal of Medical Discoveries, 2(1);
46. Omid P, Soren F (2025). The Digital Double: Data Privacy, Security, and Consent in AI Implants West J Dent Sci 2(1): 108.
47. Panahi, O. (2023). Ketenci Çay F. NanoTechnology. *Regenerative Medicine and Tissue Bio-Engineering. Acta Sci Dent Sci*, *7*(4), 118-122.
48. Panahi, P., Bayılmış, C., Çavuşoğlu, U., &Kaçar, S. (2021). Performance evaluation of lightweight encryption algorithms for IoT-based applications. *Arabian Journal for Science and Engineering*, *46*(4), 4015-4037.
49. Panahi, U., & Bayılmış, C. (2023). Enabling secure data transmission for wireless sensor networks based IoT applications. *Ain Shams Engineering Journal*, *14*(2), 101866.
50. Omid Panahi, and Uras Panahi. AI-Powered IoT: Transforming Diagnostics and Treatment Planning in Oral Implantology. J AdvArtifIntell Mach Learn. (2025). 1(1): 1-4.
51. Panahi, P., & Dehghan, M. (2008, May). Multipath Video Transmission Over Ad Hoc Networks Using Layer Coding And Video Caches. In *ICEE2008, 16th Iranian Conference On Electrical Engineering,(May 2008).* (pp. 50-55).
52. Baki koyuncu, pejman panahi, Kalman Filtering of Link Quality Indicator Values for Position Detection by Using WSNS, Int'l Journal of Computing, Communications & Instrumentation Engg. (IJCCIE), volume 1, 2014.
53. Panahi P. Providing consistent global sharing service over VANET using new plan. In 2009 14th International CSI Computer Conference.
54. Dr Uras Panahi, Redes AD HOC: Aplicações, Desafios, Direcções Futuras, Edições Nosso Conhecimento, ISBN: 978-620-8-72962-2.
55. Dr Uras Panahi, Sieci AD HOC: Zastosowania, wyzwania, przyszłe kierunki, Wydawnictwo Nasza Wiedza, ISBN: 978-620-8-72967-7.
56. Dr Uras Panahi, Reti AD HOC: Applicazioni, sfide e direzioni future, Edizioni Sapienza, ISBN: 978-620-8-72965-3.
57. Dr Uras Panahi, Redes AD HOC: Aplicaciones, retos y orientaciones futuras, Ediciones Nuestro Conocimiento, ISBN: 978-620-8-72966-0.
58. Dr Uras Panahi, Réseaux AD HOC : Applications, défis et orientations futures, Editions Notre Savoir, ISBN: 978-620-8-72964-6.



**Citation:** Patrik James Kennet, Soren Falkner, (2026) Massachusetts Institute of Technology, Massachusetts Ave, Cambridge, United States J. Clinical Case Reports and Clinical Practice 1(3): dx.doi.org/CCRCP/PP.0010

59. Omid Panahi. "AI Ushering in a New Era of Digital Dental-Medicine". Acta Scientific Medical Sciences 8.8 (2024). 131-134.
60. Panahi, O., & Zeinaldin, M. (2024). AI-Assisted Detection of Oral Cancer: A Comparative Analysis. *Austin J Pathol Lab Med*, *10*(1), 1037.
61. Panahi, O. (2025). Wearable Sensors and Personalized Sustainability: Monitoring Health and Environmental Exposures in Real-Time. European Journal of Innovative Studies and Sustainability, 1(2), 1 1-19. https://doi.org/10.59324/ejiss.2025.1(2).02
62. Omid Panahi, Sevil Farrokh. USAG-1-Based Therapies: A Paradigm Shift in Dental Medicine. Int J Nurs Health Care. (2024).1(1):1-4.
63. Omid Panahi, Sevil Farrokh. Can AI Heal Us? The Promise of AI-Driven Tissue Engineering. Int J Nurs Health Care. (2024). 1(1):1-4.
64. O. Panahi. (2025). The Future of Medicine: Converging Technologies and Human Health. *Journal of Bio-Med and Clinical Research*. *RPC Publishers*. 2(1);



**Citation:** Patrik James Kennet, Soren Falkner, (2026) Massachusetts Institute of Technology, Massachusetts Ave, Cambridge, United States J. Clinical Case Reports and Clinical Practice 1(3): dx.doi.org/CCRCP/PP.0010

**Citation:** Patrik James Kennet, Soren Falkner, (2026) Massachusetts Institute of Technology, Massachusetts Ave, Cambridge, United States J. Clinical Case Reports and Clinical Practice 1(3): dx.doi.org/CCRCP/PP.0010

**Citation:** Patrik James Kennet, Soren Falkner, (2026) Massachusetts Institute of Technology, Massachusetts Ave, Cambridge, United States J. Clinical Case Reports and Clinical Practice 1(3): dx.doi.org/CCRCP/PP.0010