

# 人工知能 (Artificial intelligence : AI) に関する 倫理規制の国際動向・技術開発の歴史・将来展望 — 世界医師会『台北宣言』改訂に寄せて —

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## Evolving Artificial Intelligence (AI): Global trend of ethics, regulations, technological developments and future perspectives, observed being inspired by the revision the WMA Declaration of Taipei

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### Abstract

In this report, we reviewed ethics, regulations, technological developments and future perspectives of artificial intelligence (AI) motivated by the two key events. The first is the 2024 amendment of the World Medical Association (WMA)'s Declaration of Helsinki (DoH), the prestigious ethical principles for research involving human participants, first referred the WMA's Declaration of Taipei (DoT) on health databases and biobanks which entered into the second revision process in 2025; the second is that the Statement on AI issued by the WMA in 2025 required that any use and generation of patient information by AI must adhere to the DoT. Hoping that this report will be consulted in relevant communities, it summarised our observations in the following structure:

I . Ethics and Regulation of AI

II . History of AI Technological Innovation

III . Healthcare Singularity: Advancing Medicine

Given the rapid pace of research and development in this field, readers undertaking practical tasks of developing or using AI are advised to examine relevant literatures directly. We also hope that deliberations on the relationship between AI and human society will be further deepened and matured.

### Key words

artificial intelligence, human-in-the-loop, technological singularity, research ethics, data governance, machinocene

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