



# Artificial Intelligence in scientific writing: Responsibility, transparency, and the future of authorship

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Artificial intelligence (AI) is increasingly influencing how clinical research is written, edited, and prepared for publication. Its integration into scientific practice is inevitable, yet its effects on the quality, reliability, and ownership of academic work remain far from fully understood. Journals must be clear in setting standards early, maintaining transparency, responsibility, and critical oversight, accepting that such guidance will likely remain behind real world, routine use.

The Generative Artificial Intelligence Transparency (GAIT) 2024 guidance, recently published in *Impact Surgery*<sup>1</sup>, provides one such framework. It recommends that all uses of AI in manuscript preparation are clearly disclosed and that human authors retain full responsibility for the integrity of the work. GAIT joins a growing body of international guidance<sup>2, 3</sup>. The CANGARU Guidelines, short for ChatGPT, Generative Artificial Intelligence, and Natural Large Language Models for Accountable Reporting and Use, are a proposed ethical framework aimed at guiding the responsible integration of generative AI tools, such as ChatGPT, into scientific research and publishing<sup>4</sup>. Research into the use of large language models is exponentially increasing (figure 1).

Many researchers are clearly already using AI tools to draft text, check grammar, format references, and prepare figures. This can save considerable time, allowing clinicians and researchers to focus more on harder tasks. Reference management, often a slow and repetitive task, can be substantially streamlined. For researchers working in low- and middle-income

settings, AI offers a means to overcome language barriers and reduce the need for expensive editorial services, democratising the ability to publish research.

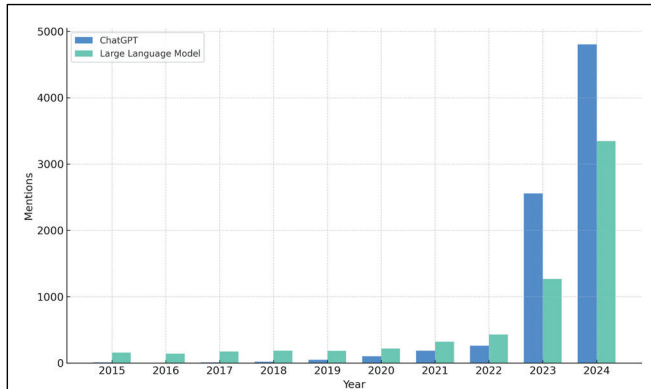
There are also clear risks. AI systems are prone to 'hallucinating,' where they can invent references or citing inaccurate sources. As AI begins to assist not only with writing but also with data analysis, statistical interpretation, and systematic reviews, the potential for unnoticed error or bias will increase. Uncritical use could lead to a weakening of the scientific literature, even while superficial productivity increases.

At Impact Surgery, we welcome innovation but remain committed to preserving the core principles of academic publishing. All uses of AI must be transparently declared using the GAIT 2024 framework<sup>1</sup>. AI tools will not be permitted to fulfil authorship criteria. Editorial and peer review processes will remain focused on human oversight and methodological quality.

The integration of AI into research and publishing brings genuine opportunities for improving efficiency and supporting global collaboration. The foundation of surgery and science must remain trust, with data are real, high quality statistical analyses, and conclusions are reliable. That trust can only be upheld through transparency, responsibility, and the continued leadership of human researchers. The arrival of AI in scientific writing is not the end of authorship. It is a call for its careful renewal.



GAIT statement<sup>1</sup> for Generative AI use: Generative AI was used for language editing in this manuscript. No content generation, data analysis, or substantive rewriting was performed. The authors take full responsibility for the accuracy and integrity of the work.



**Figure 1.** Citations per year in PubMed (created 30/04/2025).

## References

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