Ethical guidelines

- Thalamic stereoelectroencephalography in pediatric patients: Clinical practice and considerations
- The Impact of Virtual-, Augmented- and Mixed Reality during Preoperative Informed Consent: A Systematic Review of the Literature
- Clinical impact following the establishment of a specialized brain metastases tumor board
- NOVA2 expression in pituitary gland and in functioning and non-functioning pituitary adenomas: a preliminary study
- Distinct oscillatory mechanisms in low and high alpha-band activities for screening and potential treatment of Schizophrenia
- Near-Infrared Spectroscopy to Assess Covert Volitional Brain Activity in Intensive Care
- LINC00601 promotes the progression of glioma via the p-STAT3 signaling pathway
- Lipid peroxidation metabolites as biomarkers in patients with aneurysmal subarachnoid hemorrhage and cerebral vasospasm or delayed cerebral ischemia: a systematic review

With the rapid proliferation of artificial intelligence tools, important questions about their applicability to manuscript preparation have been raised.

Schneider et al. explore the methodological challenges of detecting AI-generated content in neurosurgical publications, using existing detection tools to highlight both the presence of AI content and the fundamental limitations of current detection approaches.

They analyzed 100 randomly selected manuscripts published between 2023 and 2024 in high-impact neurosurgery journals using a two-tiered approach to identify potential AI-generated text. The text was classified as AI-generated if both robustly optimized bidirectional encoder representations from transformers pretraining approach (RoBERTa)-based AI classification tool yielded a positive classification and the text's perplexity score was less than 100. Chi-square tests were conducted to assess differences in the prevalence of AI-generated text across various manuscript sections, topics, and types. To eliminate bias introduced by the more structured nature of abstracts, a subgroup analysis was conducted that excluded abstracts as well.

Approximately one in five (20%) manuscripts contained sections flagged as AI-generated. Abstracts and methods sections were disproportionately identified. After excluding abstracts, the association between section type and AI-generated content was no longer statistically significant.

The findings highlight both the increasing integration of AI in manuscript preparation and a critical challenge in academic publishing as AI language models become increasingly sophisticated and traditional detection methods become less reliable. This suggests the need to shift focus from detection to transparency, emphasizing the development of clear disclosure policies and ethical guidelines for AI use in academic writing [1)].

Schneider et al. provide a valuable contribution to the growing literature on AI in scientific publishing. Their work underscores both the increasing pervasiveness of LLMs and the urgent need for academic institutions, journals, and researchers to develop clear norms around AI use. However, methodological and interpretative limitations—particularly the uncertain reliability of detection tools—temper the strength of their conclusions.

Moving forward, the field may benefit more from transparent disclosure policies and collaborative development of ethical frameworks than from unreliable attempts at AI detection. As AI becomes more embedded in the scientific process, clarity, not concealment, must be the guiding principle.

1)

Schneider DM, Mishra A, Gluski J, Shah H, Ward M, Brown ED, Sciubba DM, Lo SL. Prevalence of Artificial Intelligence-Generated Text in Neurosurgical Publications: Implications for Academic Integrity and Ethical Authorship. Cureus. 2025 Feb 16;17(2):e79086. doi: 10.7759/cureus.79086. PMID: 40109787; PMCID: PMC11920854.