

Use of Large Language Models: Editorial Comments

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The aim of this editorial is to provide guidance relating to the use of large language models (LLMs), also referred to as conversational artificial intelligence (CAI), when submitting or peer-reviewing papers for *Acta Dermato Venereologica* (*ActaDV*).

The current unprecedented development of LLMs, fine-tuned with both supervised and reinforcement machine learning (ML), has opened an important discussion about how these tools should be used in academia. It is safe to say that the recent progress is nothing short of a disruption, and it is, without doubt, one of the greatest leaps in technology since the introduction of the Internet.

Many researchers have already become increasingly familiar with the use of LLMs, including Chat Generative Pre-Trained Transformer (ChatGPT, OpenAI, San Francisco, CA, USA), which was released on 30 November 2022 (1). LLMs have been widely disseminated and have, very rapidly become implemented in our work routines and daily lives. Remarkably, within the last 10 weeks, more than 100 million users have registered as users with ChatGPT, setting a record for the fastest-growing user base for any online application (2).

Worldwide, editorial offices, which may not yet have policies on the use of LLMs, are currently facing challenging ethics questions regarding the use of these tools and the integrity of scientific publishing. Interestingly, Science and Springer Nature, two highly influential publishing groups, have made divergent decisions about how LLMs may be used in their affiliated journals. While Science journals has (as of 26 January 2023) decided to completely prohibit the use of ChatGPT or any other AI tools (3), *Nature*, along with other Springer Nature journals, has (as of 24 January 2023) approved their use as long as the authors clearly document it in the appropriate section (i.e. methods, acknowledgements or introduction) (4). These different editorial decisions reflect the challenging nature of this development, which raises important questions regarding the originality of works presented.

ActaDV will adhere to any future guidelines proposed by the International Committee of Medical Journal Editors (ICMJE). However, before any such guidance is published, we need to select a path that properly aligns with current developments, while bearing authors', reviewers', and our readership's best interests in mind, combined with our ethical agenda and beliefs.

Fundamentally, we agree that LLMs or any similar ML system must never be listed as a co-author, even if it may appropriately have guided a researcher in the generation and conceptualization of a research idea. However, we question whether banning LLMs is the correct direction to take. We currently envisage many opportunities and advantages of allowing the use of LLMs once all research data and results have been compiled. The use of online thesaurus, translations functions, talk to text technology and other word editing programs are now an integrated part of our workflow. Consequently, it seems reasonable to allow LLM tools to improve an already generated text in terms of selection

of appropriate vocabulary and structure. After all most authors submitting manuscripts to *ActaDV* do not have English as their first language. We believe that use of these tools as a critical proof-reader, should be accepted, and we are confident that our authors will find ethically appropriate ways of improving their writing through the use of LLMs.

If authors submitting their work to *ActaDV* opt to use LLMs to help in the writing process, it is *mandatory* to state this in the acknowledgements section. However, we would like to remind all submitting authors that textbook knowledge, which only takes a few seconds for LLMs to compile, should consistently be avoided. It is essential that a balanced, unbiased, and accurate literature review is always responsibly compiled by the listed authors and must never be left to LLM. Moreover, manuscripts submitted as reviews that have not strictly adhered to the systematic review format (i.e. narrative or scoping reviews) will consistently be rejected.

As for invited reviewers, we have applied somewhat different rules. Apart from the normal routines and recommendations to the editorial office, reviewers should pay close attention to any redundant textbook style information. Fundamentally, due to potential data privacy issues, reviewers of *ActaDV* must never use (i.e. copy and paste) any content from unpublished manuscripts provided to them into any LLM. However, reviewers may use LLMs to improve language for the same reasons as set out above.

We have updated our author and reviewer instructions (available at: <https://medicaljournalssweden.se/actadv/authorguidelines> and <https://medicaljournalssweden.se/actadv/reviewerguidelines>) according to the instructions provided above. However, since this is a rapidly developing field, we acknowledge that very few, if any, of us have insights into how the use of LLMs will ultimately be integrated in routine academia. As such, we recognize that several ethics questions, relating to how these tools might be used in the future, currently remain unanswered.

From the Editorial perspective, we will pay close attention to this issue, and continue to strive to ensure that the manuscripts accepted by our journal are constructed by *human* endeavour and curiosity, while acknowledging that machines can help us in augmenting and improving how we communicate our message.

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