

Recommendations of the Doctoral School Council of the Maj Institute of Pharmacology Polish Academy of Sciences on the use of Artificial Intelligence in the preparation of a doctoral dissertation

Tools collectively referred to as Artificial Intelligence (AI) are widely used in scientific research, data analysis, literature review, text editing, and other stages of research work. This raises a number of concerns and discussions about the extent to which AI, while supporting scientific work, may replace the researcher's original contribution, and in particular to what extent it may be used in the preparation of a doctoral dissertation, which serves as the basis for awarding an academic degree.

In accordance with Article 187(1) and (2) of the Act of 20 July 2018 – Law on Higher Education and Science (Journal of Laws 2024, item 1571), the evaluation of a doctoral dissertation and its defense is based on three elements: knowledge, independence, and scientific originality. The use of AI must not give rise to doubts regarding any of these elements. It should be emphasized that the assessment of whether a dissertation meets the required criteria lies exclusively with the reviewers and the Scientific Council, and the recommendations of the Doctoral School of the Institute of Pharmacology, PAS constitute guidelines only.

1. The student clearly and precisely indicates, in the methodology section, the scope and types of AI tools used in the preparation of the dissertation.
2. The use of AI in preparing the dissertation is discussed with the supervisor or supervisors.
3. The use of AI tools in compiling the references used in the dissertation does not replace familiarity with the literature relevant to the conducted research or its interpretation. The doctoral candidate must be able to discuss the selection of cited works and their content.
4. If AI is used in text editing or in the preparation of programs or scripts, there is a risk that it may incorporate fragments available in literature, repositories, or databases. Responsibility for the use of content without proper attribution lies with the doctoral candidate preparing the dissertation.
5. The dissertation should clearly demonstrate that the doctoral candidate proposes an original solution in applying the results of their own scientific research. The use of AI must not raise doubts as to whether the conclusions and discussion could have been produced without the candidate's contribution.

Thus, AI can be a tool that enhances the scientific excellence of a dissertation, enables more complex data analyses, and opens new possibilities in the interpretation of results, but it must not replace the doctoral candidate in any of the key elements of the dissertation.