

Item No.	Specific items for verification	Comments Yes=[Y] No= [N] Not Applicable=[NA]
1	General Information of the Manuscript	
	General Information of the Manuscript Manuscript number: 1237 Section: Neurosurgery Type of Manuscript: Original article Title: Validation of specially designed and artificial intelligence-based 3D head model for training of Gasserian ganglion puncture Authors: Rinat A. Sufianov, Nargiza A. Garifullina, Aleksandr N. Zyryanov, Anton D. Zakshauskas, Margarita F. Chakhmakhcheva, Albert A. Sufianov Reviewer code: 1237_A, 1237_B First decision: 14.08.2025 Scientific Editors: Ekaterina Tao, Maria Nadinskaia Technical editor: Kseniya A. Gulyaeva Date of signature: 03.09.2025	
2	The Manuscript has been submitted by 'Your Paper, Your Way' initiative.	Y
3	Submitted manuscript is screened using Russian-language plagiarism detection software 'Antiplagiat', https://www.antiplagiat.ru . The Yandex and Google searches have also been performed to further ensure publication of original content.	Y
4	All revisions to the manuscript have been marked up using the 'Track Changes' feature in MS Word.	Y
5	The responses to the peer-reviewers' comments are consistent with the changes made to the manuscript.	Y
6	The revised manuscript is provided.	Y
7	The text of the manuscript is printed on a white background in black Times New Roman font, size 12, line spacing single on a page of A4 size (210x295 mm) with 2 cm margins on all sides of the text. Alignment of the text in width, without hyphenation and a paragraph. Manuscript pages are numbered sequentially. All components of the article, including tables and illustrations (drawings, diagrams, photographs), are in the same Word format file, with the extension doc. or docx.	Y
8	Editorial Office's Comments	NA
9	Proofreading was done by native speaker of English.	Y
10	The title concisely summarizes the main topic of the study and is not too long (no more than 170 characters with spaces).	Y

	Abbreviations and irrelevant words, any Arabic numbers or uncommon abbreviations are avoided.	
11	A short running title is provided (no more than 6 words).	N
12	The authors' full, family (sur) names and full / abbreviated first names are listed on the title page.	Y
13	The authors' affiliation (name of the institution(s), the work was performed, the city and country) are listed on the title page.	Y
14	The Abstract section is formatted according to the article specific style (structured vs. unstructured) and word count thresholds are as indicated in Author Guidelines in the official website of Sechenov Medical Journal (https://www.sechenovmedj.com/jour/about/submissions#authorGuidelines). Abbreviations used in the abstract are introduced in parentheses after their first mention. The abstract text is consistent with the main text of the manuscript. Numerical data in the abstract are presented in the same way as in the main text of the manuscript.	Y
15	The 'Keywords' list provides 5-8 keywords that reflect the main content of the study and don't duplicate the title. Each keyword is separated by a semicolon.	Y
16	MeSH terms are listed on the title page.	Y
17	The 'For citation' contains authors' names, manuscript title, journal name, number of volume, issue and pages, and doi. The family (sur) name of all authors should be typed with the first letter capitalized, followed by their abbreviated first and middle initials.	Y
18	The 'Corresponding author' passage provides the corresponding author's full first and family (sur)names, abbreviated title (e.g., MD, PhD, Cand. Of Sci., Dr. Of Sci.), affiliated institute's name and complete postal address (including zip code) and e-mail (written in all lowercase).	Y
19	The 'Ethics statements' are provided in accordance with the manuscript type (e.g., Manuscript No. Institutional review board statement). The statement about the receipt of the patient's signed informed consent is included in the text of the manuscript.	Y
20	The data that support the findings of this study are available from the corresponding authors on reasonable request.	Y
21	The 'Conflict of interests' statement is provided.	Y
22	The 'Financing' section describes the source(s) of financial support and includes the corresponding identification number(s) and program ID(s) if available.	Y
23	The 'Acknowledgements' section expresses gratitude to any persons or organizations for technical support (e.g., providing instrumentation, equipment or experimental materials, and/or assistance in experimental work), non-technical services (e.g.,	Y

	useful inspiration, suggestions, guidance, or review), and/or any other auxiliary work. Acknowledgement agreement is provided.	
24	The title, abstract and metadata (items No. 10–19, 21-23 in the checklist) are presented both in Russian and English.	Y
25	List of abbreviations is provided.	Y
26	The article 'HIGHLIGHTS' section contains 3 to 5 key messages.	Y
27	The article is structured according to EQUATOR guidelines (https://www.equator-network.org/reporting-guidelines/) and word count thresholds are as indicated in Author Guidelines in the official website of Sechenov Medical Journal (https://www.sechenovmedj.com/jour/about/submissions#authorGuidelines).	Y
28	The first section clearly describes the relevant background information for the study. The most relevant and recent (within the past 5 years) literature is cited, with the exception of rare instances of seminal literature citations. All technical terms and/or abbreviations are explained and/or defined, with the full name of abbreviations given upon first appearance in the text and the abbreviation presented in parentheses [e.g., 'blood pressure (BP)']. When weaknesses of previous studies are described in the text to highlight the innovations related to the current study, the information is presented carefully. The final paragraph states the aim of the study.	Y
29	The 'MATERIALS AND METHODS' section clearly and accurately describes all materials and methods used to obtain the data presented in the article and is adequate for a reader to repeat the study.	Y
30	Flow chart is provided for original study. The scheme of experiment is provided for animal research and <i>in vivo</i> experiments.	Y
31	Subsection 'Statistical analysis' is provided. Statistical methods are appropriate. The choice of statistical methods is justified.	Y
32	The 'RESULTS' section concisely describes the results. Representative data and data that have scientific significance are emphasized. Data is presented in either the text, a table or figure (e.g., chart, diagram, graph or image), but is not repeated among each. Information presented in the tables and figures clearly describes the trends, meaning, and inferences. Results described in textual form are accurate, concise and clear.	Y
33	Statistical symbols are accurate; $p > 0.05$ is denoted as 'n.s.'. In case of several p-values superscript should be added (e.g., ^a $p < 0.05$, ^b $p < 0.01$). Additional files and study materials not included in the supplementary material should be deposited in general purpose or institutional open access repositories.	Y

34	Data and statistical methods used in the article were examined by a professional biostatistician on the Sechenov Medical Journal editorial staff.	Y
35	The 'DISCUSSION' section (1) summarizes the most important results; (2) explains the results, compared with any existing studies and draws conclusions based on the results; (3) points out the limitations of the study and their impact on the results, as well as proposes further advice on future research topic(s) or direction(s); and (4) describes the theoretical significance and practical value of the findings.	Y
36	The 'CONCLUSION' section includes brief conclusions and recommendations, as well as directions for future research.	Y
37	The 'Author contributions' passage describes the specific contribution(s) made by each author. The author's names are listed in the following format: full first name, followed by abbreviated middles names and full family name. E.g., 'Ivan V. Ivanov developed the concept and design of the study, collected and analyzed the data and drafted the manuscript. Ivan V. Ivanov, Alexey I. Kuzin, Pavel L. Borovski took part in editing of the text. All authors approved the final version of the article.'	Y
38	The 'REFERENCES' section lists the references in the Vancouver style. In the text of the article, bibliographic references are given in Arabic numerals in square brackets (e.g., [1-3]). All works are listed in citation order in the text. Individual surnames of authors mentioned in the text must be preceded by initials (the names of foreign authors are given in the original transcription, e.g., A. Alvarez). Each source is indicated on a new line with a serial number. If the team of authors includes more than 3 authors, indicate the first three authors and then put 'et al.' References to electronic resources, laws, subordinate acts, website links, technical information, etc., are in the form of footnotes.	Y
39	Journal references have been verified to ensure that there are no duplicate references and that the DOI and PMID numbers are correct. For references not included in PubMed: EDN (for references included in RSCI) is provided; the name of journals in other languages are listed according to official journal websites. For books and monographs, the ISBN is mandatory.	Y
40	The number of cited references is appropriate for the article type as indicated in Author Guidelines in the official website of Sechenov Medical Journal (https://www.sechenovmedj.com/jour/about/submissions#authorGuidelines).	Y
41	Tables and illustrations are numbered in Arabic numerals, have a legend (Table 1 (the name), Figure 2 ... (the name)) and have a	Y

	link in the text (tab. 1, fig. 2). All clarifications, including a breakdown of abbreviations, should be placed in footnotes (notes to the table). Only one legend is provided for each multi-panel figure consisting of graphs that depicts data of the same theme (e.g., Figure 1 Magnetic resonance imaging of the brain on the second day after aneurysm clipping. A: ...; B: ...; C: ...; D: ...).	
	Supplementary files	
42	Figures are provided in separate files as indicated in Author Guidelines in the official website of Sechenov Medical Journal (https://www.sechenovmedj.com/jour/about/submissions#authorGuidelines).	Y
43	The peer-reviewers' letter containing their comments is provided. The response letter is also provided.	Y
44	The related ethics and relevant documents are provided, such as (1) Institutional review board approval form; (2) Institutional animal care and use committee approval form; (3) Signed informed consent form(s).	Y
45	Clinical trial registration statement is provided.	Y
46	Biostatistics review is provided.	N
47	Grant or funding source information for the study has been verified.	Y
48	All authors of the submitted manuscript signed the 'Author Agreement' of the Sechenov Medical Journal.	Y
49	The graphic abstract is submitted by the authors and formatted by the designer in accordance with the journal's requirements.	Y
50	This document (Checklist of Responsibilities for Editors) has been saved under the file name: 1237_editors_list_ET_MN_KG_2025_09_03	Y