

### ORIGINAL ARTICLE

# Research on capacity building for high-quality development of Chinese medical journals: A comprehensive study of the journal China Oncology

Ming  $Ni^{1,2,3,*}$ , Linhui Wang  $^{1,2,3}$ , Guangtao  $Li^{1,2}$ , Man Peng  $^{1,2}$ , Hong  $Xu^{1,2}$ 

#### **ABSTRACT**

Background: High-quality development and enhancement of global reputation are important for Chinese biomedical journals. This study analyzed the high-quality development status and strategies of China Oncology since the establishment of the Fifth Editorial Board, aiming to provide a reference for the high-quality development of biomedical journals in China. Methods: This study summarized all strategies adopted from 2020 to 2024 to enhance the competitiveness of China Oncology, including expanding the editorial board members, establishing policies, improving writing quality (following the Enhancing the QUAlity and Transparency Of health Research [EQUATOR] Network guidelines), performing the Principles of Transparency and Best Practice in Scholarly Publishing, and applying for inclusion in international databases. In addition, GraphPad Prism 10.0 was used for graphical analysis. Results: China Oncology enhanced global influence and contributed to the improvement of cancer prevention and treatment. China Oncology has strengthened various capacity building through multidimensional development and has achieved significant results in all aspects, including expanding the editorial board members and establishing a youth editorial board, strictly controlling the academic quality of journals, promoting journal transparency, carrying out an open-access (OA) publishing model with Creative Commons (CC) license CC BY-NC-ND 4.0, expanding inclusion in international databases (indexed by Scopus, Directory of Open Access Journals [DOAJ], Excerpta Medica Database [Embase], EBSCO, Japan Science and Technology [JST], and Index Copernicus), and enhancing content quality by following the EQUATOR Network guidelines. Conclusion: By applying for inclusion in renowned international databases, enhancing academic influence and international visibility by expanding the members of the editorial board, strictly following the EQUATOR Network guidelines and Principles of Transparency and Best Practice in Scholarly Publishing, strengthening publishing ethics, focusing on oncology hotspot studies, and improving the scientific and editorial quality of the manuscripts, Chinese medical journals can achieve high-quality development.

**Key words:** biomedical journals, high-quality development, Enhancing the QUAlity and Transparency Of health Research Network, *Principles of Transparency and Best Practice in Scholarly Publishing*, database inclusion, peer review

## **INTRODUCTION**

China Oncology (ISSN 1007-3639, CN 31-1727/R), which

started publication in 1991, is an open-access (OA) peer-reviewed monthly publication and is currently a renowned Science, Technology, and Medicine (STM)

#### \*Corresponding Author:

Ming Ni, Department of Editorial Office, Fudan University Shanghai Cancer Center, No. 270 Dong'an Road, Shanghai 200032, China. Email: niming@shca.org.cn; https://orcid.org/0000-0001-6024-9658

Received: 31 March 2025; Revised: 3 July 2025; Accepted: 13 July 2025

https://doi.org/10.54844/ep.2025.0957

This is an open access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs 4.0 International License (https://creativecommons.org/licenses/by-nc-nd/4.0/).

Department of Editorial Office, Fudan University Shanghai Cancer Center, Shanghai 200032, China

<sup>&</sup>lt;sup>2</sup>China Oncology Publishing House Co., Ltd., Shanghai 200032, China

<sup>&</sup>lt;sup>3</sup>Biomedical Journal Professional Committee, Shanghai Society for Scientific & Technical Periodicals, Shanghai 200032, China

journal in China. China Oncology is indexed by A Guide to the Core Journals of China (2023 Edition), mainly reports on cutting-edge research in the field of scientific information from global sources across all oncologic specialties, focusing on the latest research results in clinical, basic, and translational oncology, and featuring research articles, editorial comments, reviews, guidelines, and case reports. China Oncology promotes the exchange of research achievements in the field of oncology in China, improves the level of cancer prevention and treatment, promotes the Healthy China strategy, and provides a platform for academic exchange and presentation for authors and readers.

In 2019, China Association for Science and Technology, the Central Propaganda Department, the Ministry of Education, and the Ministry of Science and Technology of the People's Republic of China jointly issued the Opinions on Deepening Reform and Cultivating World-Class Scientific and Technological Journals, proposing the guiding ideology and basic principles for the development of scientific and technological journals in China and clarifying the goal of building world-class scientific and technological journals. [1,2] Therefore, the editorial board of China Oncology launched a re-election campaign in 2020, and finally, the Fifth Editorial Board of China Oncology was successfully established in 2021. Since then, the editor-in-chief and the members of the Fifth Editorial Board have established higher requirements for seeking the new purpose of development. Achieving high-quality development and enhancing the influence of China Oncology have become long-term tasks, including improving academic quality (strictly following the peer review policy and scientific rigor), upholding publishing ethics and eliminating academic misconduct, applying for inclusion in international databases and enhancing global reputation, promoting journal transparency and OA policy according to the Principles of Transparency and Best Practice in Scholarly Publishing, [3,4] expanding the editorial team and establishing a youth editorial board, building the journal's brand (F5000, excellent columns, commissioned articles, awards, and academic promotion), elevating writing quality by following the checklist of the guidelines released by the Enhancing the QUAlity and Transparency Of health Research (EQUATOR)Network, [5] strengthening editorial literacy, and improving publishing quality. This study analyzed the high-quality development status since the establishment of the Fifth Editorial Board of China Oncology, aiming to provide a reference for the highquality development of biomedical journals in China.

## **METHODS**

This study summarized all strategies adopted to enhance the competitiveness of *China Oncology* from 2020 to 2024, including expanding the editorial board members, establishing policies, improving writing quality (following the EQUATOR Network guidelines), performing the *Principles of Transparency and Best Practice in Scholarly Publishing*, and applying for inclusion in international databases. Then, this study analyzed all means and evaluated the results and effects to provide a reference for the improvement of the work quality of biomedical journals. In addition, GraphPad Prism 10.0 was used for graphical analysis.

### **RESULTS**

## Build a strong editorial board

The Fifth Editorial Board of China Oncology is led by the editor-in-chief from Fudan University Shanghai Cancer Center, and the Associate Editors-in-Chief are all from the top five cancer centers in China. The editorial board consists of 121 world famous oncological experts, including 5 academicians of the Chinese Academy of Sciences and 4 academicians of the Chinese Academy of Engineering. In addition, China Oncology recruited young scientists and established the First Youth Editorial Board in 2024. The director of the Youth Editorial Board is the Vice President of Fudan University Shanghai Cancer Center, and 115 outstanding young scholars across the country serve as members of the Youth Editorial Board, providing China Oncology with a strong team of experts for peer review. The main responsibilities of the Youth Editorial Board members are conducting peer reviews, contributing articles, and promoting published content. In 2024, 304 articles were reviewed and 10 articles were written by all members of the Youth Editorial Board.

# Strictly obey the peer review policy and scientific rigor

China Oncology ensures high-quality manuscripts and maintains academic standards through peer review. The initial quality control of manuscripts is primarily the responsibility of the director of the editorial department of China Oncology, which is the initial review step. The review cycle typically takes two days and filters out manuscripts that do not meet the journal's aim and purpose, lack experimental methods or results, and have a high similarity rate with published papers. The rejection rate at this stage is 68%. The remaining 32% that passed the initial review undergo academic quality control (peer review). Academic quality control is the most important step and can be divided into four substeps. First, academic preliminary review, which is conducted by a panel of preliminary review experts and takes an average of 5 days. The main focus is on the novelty and practicality of the research, with a rejection rate of approximately 21%. Second, manuscripts undergo peer review, which typically takes an average of 2 weeks. In this step, manuscripts are comprehensively evaluated by focusing on the experimental design, clinical value, scientific rigor, methodological rigor, and cutting-edge aspects, with a rejection rate of 52%. Third, manuscripts are reviewed during monthly editorial board meetings, which are attended by the editor-in-chief or Associate Editors-in-Chief, and an offline final draft meeting is held once a month to review the manuscripts that have passed peer review. The rejection rate is approximately 30%. Fourth, manuscripts that passed the final draft meeting undergo statistical expert review to determine whether statistical methods are used suitably or the data are correctly calculated. This step is always conducted by a science editor or reviewer with specialized statistical knowledge. The main principle is to determine whether quantitative data represent independent samples or paired samples. In addition, the distribution characteristics of the data should be clarified, that is, whether the normality and homogeneity of variance tests have been conducted. If independent sample data follow a normal distribution and have the same variance, a t-test can be performed. If the variances are not uniform, a t-test (corrected t-test) is used. Otherwise, nonparametric tests (Wilcoxon rank sum test and Mann-Whitney U test for independent samples; Wilcoxon signed-rank test for paired samples) are used.

Publishing quality control is completed by scientific editors. Scientific editors integrate the reviewers' comments from the four substeps mentioned above and provide feedback to authors for revision. After the editing, typesetting, proofreading, and printing processes, the publication of the journal is completed.

# High-value publishing ethics and elimination of academic misconduct

China Oncology has developed a peer review system, an editorial system, author guidelines, research ethics, publishing ethics, a plagiarism statement, a plagiarism policy, an OA statement, etc., in accordance with the standards released by the Committee on Publication Ethics (COPE). Reporting any area of bioscience research using laboratory animals should follow the checklist of Animal Research: Reporting of In Vivo Experiments 2.0 (ARRIVE 2.0). [6] In addition, an ethics approval certificate, an animal production license, an animal quality certificate, and an animal use and care report form are needed.

## Follow the EQUATOR Network guidelines

China Oncology strictly upholds scientific and methodological rigor in accordance with the Recommendations for the Conduct, Reporting, Editing, and Publication of Scholarly Work in Medical Journals released by the International Committee of Medical Journal Editors (ICMJE)<sup>[7]</sup> and the guidelines released by the EQUATOR Network.<sup>[5]</sup>

Accordingly, the journal formulated its own publication standards and disclosure item lists for clinical trials, basic research, guidelines, and review articles. The EQUATOR Network guidelines, mainly used by China Oncology, are shown in Table 1[6,8-13]. All submitted articles must follow the corresponding EQUATOR guidelines based on their type, and articles that do not follow the guidelines will be returned for revision. For example, when a paper reporting a retrospective study is submitted to China Oncology, it should be carefully evaluated to ensure that it follows the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) guidelines. Authors are required to specify the type of research, whether it is a cross-sectional study, a case-control study, or a cohort study, and a flowchart detailing the inclusion or exclusion criteria is needed. Furthermore, the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection, are required. As for the statistical methods, the following should be considered: (1) all statistical methods should be described, (2) any methods used to examine subgroups and interactions should be described, (3) how missing data were addressed, and (4) the 95% confidence interval (CI) needs to be clarified.

Currently, the disclosure list items for common manuscript types, including guidelines, clinical trials, retrospective studies, basic experiments, diagnostic reports, reviews, and case reports, are strictly used to ensure high publication quality in *China Oncology*. The scientific rigor of these articles is comparable to that of leading international journals.<sup>[14]</sup>

# Pursue research highlights and establish a brand column

In the past five years, China Oncology has focused on research hotspots, organized 55 special issues, and invited and published a total of 286 expert-invited articles. Each published article has been cited 1737 times by the Chinese S & T Journal Citation Reports (Core Edition) and 3129 times by the Chinese S & T Journal Citation Reports (Expanded Edition) on average. In the past five years, China Oncology has published a total of 56 guidelines and consensus articles. According to China National Knowledge Infrastructure, guidelines and consensus articles published in China Oncology have been cited an average of 80.2 times and downloaded an average of 3039.5 times. One article has been cited 861 times and downloaded 30,837 times. Among the tumor guidelines and consensus articles published from 2021 to 2023, China Oncology has 4 articles that ranked among the top 10 most cited and 11 articles that ranked among the top 50 most cited articles. The articles published in different columns of China Oncology from 2021 to 2024 are shown in Figure 1, and the corresponding data are shown in Table 2.

| Guideline                 | Full name  | Article type  | Key points of strategy and details   |
|---------------------------|--|---|--|
| CONSORT [8]               | Consolidated standards of reporting trials   | RCT trial, prospective study  | Clinical studies are required to be registered and provide registration numbers, clinical study ethics approval numbers, and patient informed consent statements. In terms of ethical review, the clinical research ethics approval number should be indicated   |
| STROBE <sup>[9]</sup>     | Strengthening the reporting of observational studies in epidemiology                     | Retrospective cohort, case-control study, or cross-sectional                      | For observational research papers and model prediction papers, in addition to requiring authors to strictly follow the STROBE checklist items, authors are required to clarify the type of research, specifically cross-sectional studies, case-control studies, or cohort studies, and create flowcharts to ensure the correctness of the research design and result analysis. The flowchart of the patient enrollment or the exclusion criteria should be provided in the manuscript |
| STARD <sup>[10]</sup>     | Standards for reporting of diagnostic accuracy   | Retrospective cohort,<br>case–control, or cross-<br>sectional diagnostic<br>study | Research papers on diagnostic experiments must strictly adhere to STARD. The main objective of diagnostic testing research is to measure the sensitivity, specificity, likelihood ratio, odds ratio, AUC, and other indicators of the test to determine its reliability and practicality in different clinical scenarios. To enhance the quality and transparency of such research   |
| PRISMA <sup>[11]</sup>    | The PRISMA2020<br>statement: An updated<br>guideline for reporting<br>systematic reviews | Systematic review and meta-analysis   | The research protocols and writing standards for systematic reviews and meta-analyses should refer to the PRISMA guidelines, which require authors to register and conduct literature searches, process design, forest-plot, and bias analysis in accordance with the items of the PRISMA guidelines   |
| ARRIVE 2.0 <sup>[6]</sup> | Animal research: reporting of <i>in vivo</i> experiments 2.0                             | Animal preclinical studies  | Reporting any area of bioscience research using laboratory animals should follow the checklist of ARRIVE 2.0. In addition, an ethics approval certificate, an animal production license, an animal quality certificate, and an animal use and care report form are needed  |
| AGREE <sup>[12]</sup>     | Appraisal of guidelines for research and evaluation                                      | Guidelines  | AGREE is a tool used to improve reporting of clinical practice guidelines. Strict attention should be paid to the level of evidence and recommendation opinions  |
| CARE <sup>[13]</sup>      | Consensus-based clinical case reporting guideline development                            | Case report   | Authors and editors must strictly use the checklist of CARE  |

China Oncology keeps consistency with the updated version. RCT, Randomized Controlled Trial; AUC, Area Under the Curve; STROBE, Strengthening the Reporting of Observational Studies in Epidemiology; ARRIVE 2.0, Animal Research: Reporting of In Vivo Experiments 2.0; STARD, Standards for Reporting of Diagnostic Accuracy; PRISMA, Preferred Reporting Items for Systematic Reviews and Meta - Analyses; AGREE, Appraisal of Guidelines for Research and Evaluation; CARE, CAse REport.

Table 2: Corresponding data of articles published in different columns of China oncology from 2021 to 2024 Guideline Year Specialist's review Special article Research Review Consensus Case report **Short articles** 

Original research papers can enhance the academic influence and authority of journals. In addition, these papers are essential for clinical practice and medical decision-making, which can directly affect the treatment and health outcomes of patients, play an important role in improving the quality of medical services, and promote the dissemination and application of medical knowledge. *China Oncology* strictly controls the number of review articles and focuses on research-oriented articles, with up to two reviews per issue.

Since 2020, *China Oncology* has been requiring long abstracts in both Chinese and English, with a minimum word count of 1000 words. Strengthening the construction of the journal's scientific rigor is required. In addition to various elements of structured abstracts (background and purpose, methods, results, and

conclusions), disclosure should be made in abstracts based on the key points of different types of articles and in accordance with the requirements of the EQUATOR Network's biomedical research reporting guidelines, such as data collection, ethics approval, research registration, and registration numbers, to ensure the international visibility of Chinese journals and support applications to Medical Literature Analysis & Retrieval System Online (MEDLINE) and PubMed Central (PMC) databases.<sup>[15]</sup>

# Apply international databases and enhance global reputation

Since 2020, by implementing international publishing standards and policies, [16] requiring long English abstracts, establishing English websites, etc., China Oncology has been successively indexed by Chemical

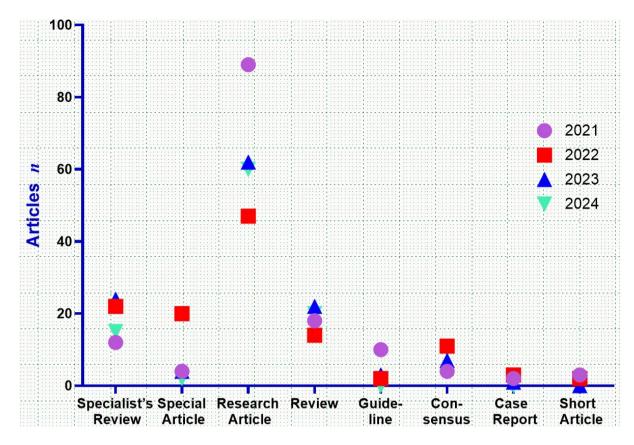


Figure 1. Articles published in different columns of China Oncology from 2021 to 2024.

Abstracts Service (CAS), Directory of Open Access Journals (DOAJ), Scopus, Excerpta Medica Database (Embase), Ulrich's Periodicals Directory, EBSCO, Japan Science and Technology (JST), Index Copernicus, World Health Organization Western Pacific Region Index Medicus (WHO WPRIM), etc. According to Scopus CiteScore data, articles published in *China Oncology* were cited 176 times in 2023, including 30 citations from journals in the *Journal Citation Report (JCR)* Q1 category. This indicates that papers published by *China Oncology* have been gradually recognized by international authors and authors worldwide are willing to publish in *China Oncology* (Figure 2).<sup>[14]</sup>

It was indexed by Scopus in December 2020; Embase/Ulrich's/EBSCO/World Journal of Clinical Indexes (WJCI), in February 2021; DOAJ, in March 2022; Chinese Science Citation Database (CSCD), in May 2024; Global Open Access Journals Directory (GoOA) and Council of Open Access Journals (COAJ), in April 2024; and European Academic Publishing (EUROPub), in January 2025.

China Oncology was indexed by Scopus in 2020, and its first CiteScore was 0.1. Its CiteScore gradually improved and reached 0.6 in 2024. In addition, the highest percentile and Percentage Cited gradually increased (Figure 3).

## OA and strictly follow the principles of transparency and best practice in Scholarly publishing

DOAJ is the world's largest OA database. DOAJ launched the first edition of the Principles of Transparency and Best Practice in Scholarly Publishing in December 2013, aimed at identifying the quality of academic journals. Currently, the Principles of Transparency and Best Practice in Scholarly Publishing have been updated to their fourth edition, consisting of four dimensions, each of which includes several items for a journal. Since 2020, China Oncology has been applying for inclusion in DOAJ, creating an English website that meets all standards of the Principles of Transparency and Best Practice in Scholarly Publishing.[17-19] Subsequently, during the application for inclusion in other databases, China Oncology improved its policies based on the inclusion requirements of each database and created a website for world-class biomedical journals. The specific implementation strategy is shown in Table 3. The CC license adopted by China Oncology is CC BY-NC-ND 4.0.

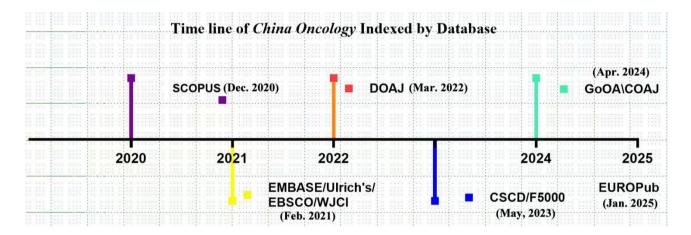
# Strengthening editorial literacy and improving publishing quality

While continuously establishing various policies for *China Oncology*, editors need to constantly improve the related knowledge reserves to achieve mutual growth

Table 3: Fourth edition of *Principles of Transparency and Best Practice in Scholarly Publishing* and the implementation strategy of *China Oncology* 

| Dimension            | Policy items  | Details of the policies by China Oncology   |
|----------------------|---|---|
| Content              | Name of a journal, website, publishing schedule, archiving, copyright, and licensing  | Complete the basic information of the website both in Chinese and English, availability of online archive and free downloads, and copyright transfer agreements                       |
| Journal<br>practices | Publication ethics and related editorial policies, peer view policy, and access model | Ethics (publishing ethics, clinical trial ethics, and experimental animal ethics), editorial policy, peer review policy (single blind), OA statement, and CC license (CC BY-NC-ND4.0) |
| Organization         | Ownership and management, advisory body, and editorial team/contact information       | Clearly display the information of the journal's publishing unit, sponsoring authority, editorial board (including members and units), and editorial department                       |
| Business practices   | Author fees, other revenue, advertising, and direct marketing                         | Advertising policy, APC (fee waiver)  |

CC, Creative Commons; OA, open-access; APC, Article Processing Charge.



**Figure 2.** Timeline of *China Oncology* indexed by international famous databases from 2021 to 2024. DOAJ, Directory of Open Access Journals; GoOA, Global Open Access Journals Directory; COAJ, Council of Open Access Journals; EMBASE, Excerpta Medica Database; WJCI, World Journal of Clinical Indexes; CSCD, Chinese Science Citation Database; EUROPub, European Academic Publishing.

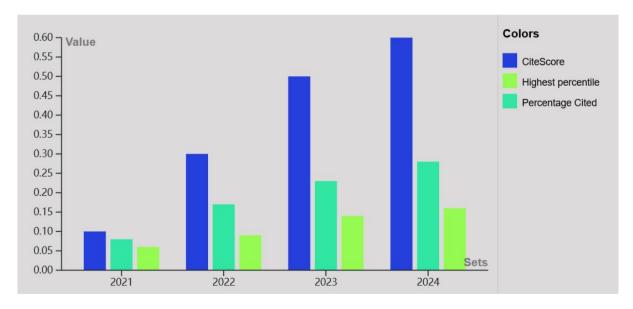


Figure 3. Timeline of China Oncology indexed by international famous databases from 2021 to 2024.

between editors and the journal.<sup>[20]</sup> The specific measures involve the following aspects: First, enhancing and updating editorial and oncological knowledge reserves.

The rapid development of oncology requires editors to constantly monitor the latest advances to remain at the forefront of professional knowledge. In addition, in terms of editing practice, editors should maintain the progressive nature of editing standards and improve their skills by timely updating their knowledge. While conducting external learning, our editors regularly organize internal learning, with editors taking turns developing topics for internal lectures and leading a team of editors to learn and improve together. Second, science editors of *China Oncology* should be familiar with the EQUATOR Network guidelines to improve manuscript quality. Editors of *China Oncology* take turns delivering lectures regarding the EQUATOR Network guidelines. Third, try to be a research-oriented editor.

## **DISCUSSION**

China Oncology has established a strong editorial board and a youth editorial board to become a high-quality journal. Currently, China Oncology is still recruiting international editorial board members to expand its pool of experts for peer review and ensure the scientific rigor of the articles that it publishes. In addition, China Oncology urges editorial board members to submit manuscripts. Since 2022, at the beginning of each year, editorial board members from different oncological specialties have prepared summaries of the research developments in their field from the previous year, providing high-quality review papers for China Oncology.

Academic misconduct is not tolerated by *China Oncology*. In recent years, *China Oncology* has issued a statement requiring thorough verification of funding information disclosed in manuscripts. The funding information of manuscripts without fund approval documents, with funding that is inconsistent with the manuscript content, and with funding sources not represented by any of the authors must be removed to ensure authenticity. In summary, scientific research integrity and the elimination of academic misconduct are important for *China Oncology*.

In December 2021, the National Press and Publication Administration officially released the *Development Plan for the Publishing Industry during the 14th Five-Year Plan Period*, which regards "strengthening and optimizing themed publishing" as an important content for the development of the publishing industry. Since 2021, on the basis of the tumor incidence rates, *China Oncology* has been inviting experts in oncological research to contribute reviews on the recent developments in the diagnosis and treatment of these tumors. In addition, two special issues focusing on tumors with high incidence rates are published annually.

In addition to directly soliciting manuscripts, we indirectly invite papers by analyzing the top 200 English and Chinese journals with the highest citation and

download frequencies each year. Cluster analysis allows us to identify research hotspots and authors in the field of oncology, both domestically and internationally<sup>[22–23]</sup>. Therefore, we can precisely invite manuscripts on special topics for *China Oncology*. At the same time, it draws on the development experience of high-impact OA journals to improve the global reputation of *China Oncology*.

The establishment of famous brand columns is essential for the high-quality development of China Oncology. In 2007, China Oncology created a brand-new column called Guidelines and Consensus and published the Expert consensus on perioperative comprehensive treatment for high-risk prostate cancer (2007 Edition). Since 2017, at the initiative of the editor-in-chief of China Oncology, editors have been inviting submissions of guidelines and consensus articles. Several directors of professional committees of Shanghai Anti-Cancer Association (SACA) have expressed their willingness to contribute to China Oncology by submitting guidelines and consensus articles. In addition, the publication of these high-quality evidence-based guidelines and consensus articles will help in achieving the goal of standardized diagnosis and treatment. [24] Since 2018, Guidelines and Consensus has been a regular column in China Oncology, accounting for more than 50% of the total number of published articles. In addition, this column was recognized as an Excellent Program in East China in 2020 and 2024. After the guidelines and consensus articles are published, China Oncology will support the authors in delivering lectures nationwide.

Biomedical journals in China apply for international database inclusion to improve their international visibility and enhance their global influence and reputation. Before applying for inclusion, we ensure that we are fully familiar with the requirements, standards, and procedures of each database. Currently, some global databases, such as DOAJ, PMC, MEDLINE, and Scopus, require journals to display a detailed peer review policy on their websites to counter predatory publishing. STM journals in China indexed by DOAJ mainly have chosen single-blind or double-blind peer review policies (151 vs. 144).[14] The results of a questionnaire survey showed that in biomedical journals, the number of single-blind peer reviews is significantly higher than that of double-blind peer reviews. China Oncology adopts a single-blind peer review policy and ensures the scientific rigor of the journal using a five-step review system, which includes initial review by the managing editor, academic preliminary review, peer review, editorial board monthly meeting review, and statistical expert review. While ensuring academic quality, all details of each review step are displayed on both Chinese and English websites of China Oncology.

Scientific and editorial quality assessment by MEDLINE and PMC is always strictly carried out on journals. [15] The assessment process also considers the guidelines released by the EQUATOR Network. Therefore, scientific rigor and methodological rigor are essential for improving the quality of journal articles and applying for MEDLINE and PMC. China Oncology strictly follows the guidelines for biomedical research reports of the EQUATOR Network, aiming to improve the writing and editorial quality of the journal. Currently, various biomedical journals have gradually adopted the EQUATOR Network guidelines to standardize article writing and editing. [25-26] In the near future, writing guidelines for different types of papers applicable to biomedical journals in China will also be developed based on this foundation. In addition, with the help of the High Quality Development Salon by the Shanghai Society for Scientific & Technical Periodicals, efforts are being made to improve the scientific and editorial quality of biomedical journals in Shanghai.

OA can improve the visibility of journals and promote the dissemination of academic content. Therefore, it is also necessary to apply for inclusion in OA databases.[14,17-18] A study[27] reported that many biomedical journals in China offer free paper downloads but lack clear copyright agreements and CC licenses, that is, the Bronze OA model. Currently, Bronze OA has the highest proportion of biomedical OA journals in China, and Gold OA and Diamond OA have relatively smaller proportions. Since 2020, China Oncology has adopted the CC BY-NC-ND 4.0 license, which includes attribution, noncommercial use, and no derivatives. OA statements and the CC license<sup>[28-29]</sup> have been added to the Chinese and English websites of China Oncology, clarifying the permission to download articles and protecting the rights of authors and readers. Readers are required to follow the CC BY-NC-ND regulations and can download papers for free. However, the downloaded papers cannot be used for commercial purposes or derivatives (including adaptation, translation, annotation, and organization as stipulated in the Copyright Law of the People's Republic of China). Only the original version can be disseminated.

In January 2022, the organization cOAlition S, which promotes the Gold OA Plan S, released its annual report, *Accelerating Open Access.*<sup>[30]</sup> The report summarized the overall development and future trends of Plan S and pointed out that the Gold OA model is an important OA model for the future. Most Bronze OA journals in China charge fees from authors and offer free downloads, with a similar business model to that of Gold OA. However, they have no clear copyright statements. *China Oncology* is a Gold OA journal that has

clearly exhibited the APC standards on its website and the OA statement. It has been included in OA databases such as DOAJ, GoOA, and COAJ. Therefore, the OA policy and countermeasures of *China Oncology* can serve as a reference for biomedical journals in China.

China Oncology has been indexed by many renowned international databases. In addition, China Oncology has significantly enhanced its academic influence and international visibility by expanding the members of its editorial board, strictly following the EQUATOR Network guidelines and Principles of Transparency and Best Practice in Scholarly Publishing, strengthening publishing ethics, focusing on oncology hotspot studies, and improving the scientific and editorial quality of manuscripts. As reported in a previous study, summarizing the high-quality development status of China Oncology, we hope that this article will serve as a reference for the high-quality development of Chinese biomedical journals.

## **DECLARATIONS**

## Acknowledgement

None.

#### **Author contributions**

Ni M: Conceptualization, Methodology, Writing, Statistical analysis. Wang LH: Database retrieving, Part of writing—original draft and editing the final draft. Li GT, Xu H: Data analysis, Proofreading. Peng M: Data collection and analysis. All authors have read and approved the final version of the manuscript.

#### Source of funding

This work was supported by Shanghai University Science and Technology Journal Research Fund (2024, No. SHGX2024B16) and Shanghai Oriental Talent Program—Youth Project (No. QNZH2024094).

## Ethical approval

Not applicable.

## Informed consent

Not applicable.

## Conflict of interest

Ming Ni is an Editorial Board Member of Editing Practice. The article was subject to the journal's standard procedures, with peer review handled independently by the member and research group.

# Use of large language models, Al and machine learning tools

None declared.

## Data availability statement

Data used to support the findings of this study are available from the corresponding author upon request.

#### **REFERENCES**

- The Publicity Department of China Association for Science and Technology, Academic Department of China Association for Science and Technology. [Deepening reform and cultivating world-class scientific and technological journals]. China Association for Science and Technology. Updated August 16, 2019. Accessed July 15, 2025. http:// w w w . c a s t . o r g . c n / x w / T T X W / a r t / 2 0 1 9 / a r t \_ b5da1323b57c4d16b779172ad533cd88.html
- 2. Hu XJ. [Development status and analysis of English medical journals in China oriented to world first-class scientific journals]. *Chin J Sci Tech Period.* 2024;35(4):532-540.
- DOAJ. Transparency & best practice. DOAJ. Accessed July 15, 2025. https://doaj.org/apply/transparency/
- Wang Y. [Updates of "Principles of Transparency and Best Practice in Scholarly Publishing" and implications for Chinese academic journals]. Chin J Sci Tech Period. 2024;35(8):1109-1115.
- EQUATOR Network guidelines. EQUATOR Network. Accessed July 15, 2025. https://www.equator-network.org/
- The ARRIVE Guidelines 2.0: Updated guidelines for reporting animal research. Equator network. Updated March 6, 2023. Accessed July 15, 2025. https://www.equator-network.org/reporting-guidelines/ improving-bioscience-research-reporting-the-arrive-guidelines-forreporting-animal-research/
- Yu XT, Zhang JY, Wang Y. [Updates of ICMJE recommendations from 2019 to 2021 and developing trends of medical journals]. Publ Print. 2022;(4):20-26.
- CONSORT 2025 Statement: updated guideline for reporting randomised trials. equator network. Updated April 18, 2025. Accessed July 25, 2025. https://www.equator-network.org/reporting-guidelines/ consort/
- The Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) Statement: guidelines for reporting observational studies. equator network. Updated March 6, 2023. Accessed July 25, 2025. https://www.equator-network.org/reporting-guidelines/strobe/
- STARD 2015: An Updated List of Essential Items for Reporting Diagnostic Accuracy Studies. equator network. Updated March 6, 2023. Accessed July 25, 2025. https://www.equator-network.org/reporting-guidelines/stard/
- The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. equator network. Updated February 6, 2025. Accessed July 25, 2025. https://www.equator-network.org/reportingguidelines/prisma/
- The AGREE Reporting Checklist: a tool to improve reporting of clinical practice guidelines. equator network. Updated November 15, 2021. Accessed July 25, 2025. https://www.equator-network.org/ reporting-guidelines/the-agree-reporting-checklist-a-tool-to-improvereporting-of-clinical-practice-guidelines/
- The CARE Guidelines: Consensus-based Clinical Case Reporting Guideline Development. equator network. Updated April 2, 2024. Accessed July 25, 2025. https://www.equator-network.org/reporting-

- guidelines/care/
- Wang LH, Ni M. [Development status and countermeasures of China's Gold OA and Diamond OA journals: A study of the data from DOAJ]. Chin J Sci Tech Period. 2024;35(3):329-338.
- MEDLINE. Scientific and editorial quality assessment. National Library of Medicine. Updated May 2, 2024. Accessed July 15, 2025. https:// www.nlm.nih.gov/medline/medline\_journal\_selection.html
- Manley S. Letters to the editor and the race for publication metrics. J Assoc Inf Sci Technol. 2022;73(5):702-707.
- Wang LH, Ni M, Li XW. The development status and countermeasures
  of biomedical OA journals in China: A study based on statistical
  analysis of the journal indexed data in PubMed central and DOAJ. J Sch
  Commun. 2025.
- Liu J. Open access publishing in Singapore: Trends and policy perspectives. J Sch Commun. 2025;1:1-9.
- Wang LH, Ni M. [An analysis of the strategies of Chinese open access journals applying for the DOA] database]. Publ Print. 2022;(5):74-82.
- Ni M, Xu H, Wang XY, et al. [Practices and reflections on cultivating young editors in STM periodicals with a closed-loop "five-in-one: model: Experience from Shanghai Society for Scientific and Technical Periodicals]. Acta Ed. 2024;36(3):338-342.
- 21. Publicity Department of the Communist Party of China Central Committee, Ministry of Education, Ministry of Science and Technology. [Promoting the prosperity and development of academic journals]. Updated May 18, 2021. Accessed July 15, 2025. https://journals.com/download/science/party-ipa
- Qin JH, Wang JJ, Ye FY. A Metric Approach to Hot Topics in Biomedicine via Keyword Co-occurrence. J Data Inform Sci. 2019;4(4):13-25.
- Moral-Munoz JA, Arroyo-Morales M, Piper BF, et al. Thematic Trends in Complementary and Alternative Medicine Applied in Cancer-Related Symptoms. J Data Inform Sci. 2019;4(4):13-25.
- Ni M, Wang LH, Li GT, et al. [Evaluation of guidelines and consensuses related to the diagnosis and treatment of breast cancer: based on the AGREE-China]. Chin Cancer. 2022;31(10):828-838.
- Sun JF, Yang MQ. [Research on strategies of medical journal editors applying CONSORT to review RCT research papers]. *Publ Print*. 2022;(4):27-34.
- Wang YH, Xu H, Li DJ. [Interpretation and application suggestions on the Checklist for Artificial Intelligence in Medical Imaging (CLAIM): A guideline for authors and reviewers]. Publ Print. 2023;(6):89-95.
- Ding ZQ, Li CW. [The status and prospects of OA publishing in China as selected journals by the "China Science and Technology Journal Excellence Action Plan"]. Chin J Sci Tech Period. 2022;33(11):1561-1568.
- Deed. Attribution-nonCommercial-noDerivatives 4.0 international. Creative Commons website. Accessed July 15, 2025. https://creativecommons.org/licenses/by-nc-nd/4.0/deed.zh
- Ni M, Wang LH. [Current status and improvement strategies of copyright of biomedical open access journals in Shanghai, China]. Chin J Sci Tech Period. 2025;36(4):460-470.
- cOAlitions. Accelerating open access. 2021 annual review. Accessed July 15, 2025. https://www.coalition-s.org/wp-content/uploads/2022/ 01/Plan-S-annual-report-2021.pdf
- Liang Y, Yang Z, Tian H, Liu J, Li C, Dong W. The "Five Forces Model" and strategies for enhancing the influence of scientific journals. Ed Pract. 2024;2:6.