## **Open Access**

https://doi.org/10.48130/PR-2023-0003 Publishing Research **2023**, 2:3

## Establishment of an early warning list of SCI-indexed international journals with dual benefits for both scientists and publishers

Yu Mo<sup>1,2</sup>, GuangPing Liang<sup>1,2#\*</sup>, Ni Zhen<sup>1</sup>, Hui Lin<sup>3</sup>, HanYi Xiang<sup>1</sup>, En Liu<sup>3</sup>, WenHong Zheng<sup>4</sup> and HuaiMing Leng<sup>5#\*</sup>

<sup>1</sup> State Key Laboratory of Trauma, Burns and Combined Injury, Institute of Burn Research, Southwest Hospital of Army Medical University, Chongqing 400038, China

- <sup>3</sup> Department of Gastroenterology, Xinqiao Hospital of Army Medical University, Chongqing 400037, China
- <sup>4</sup> Vocational Education Center, Army Medical University, Chongqing 400038, China
- <sup>5</sup> Editorial Board of China Pharmacy, Chongqing 400042, China
- <sup>#</sup> These authors contributed equally: GuangPing Liang,

HuaiMing Leng

\* Corresponding authors, E-mail: guangpinglianggg@163.com; lenghuaiming@china-pharmacy.com

### Abstract

At the end of 2020, the National Science Library of the Chinese Academy of Sciences (CAS) released the Early Warning List (EWL) of International Journals as guidance for scholars to choose appropriate journals in which to publish. The aims of the study were to analyze the characteristics of medical-related journals in the list and to survey scholars in the field of burn specialty regarding their understanding of and attitude toward the journals in EWL to determine their attitude toward the list and the potential use of this list as a reference for international journal quality control. All 26 early warning medical journals in the EWL are characterized by a high proportion of articles from China, as well as a high rate of retraction. The average 5-year proportion of articles authored by Chinese scholars of 19 journals was over 50%, and three were over 90%. Eight journals each retracted more than 20 articles from 2016 to 2020. The questionnaire survey showed that most burn specialty scholars believed that the establishment of such a list was beneficial for enhancing research integrity and improving journal quality management, as well as selecting journals for publication. Based on our study, we recommend establishing a global list of early warning journals to allow the EWL to be updated regularly and released for free. Peer review could be introduced to boost credibility. The EWL released by CAS can provide important practical data for the 'global alliance of early warning journals' in the future.

**Citation:** Mo Y, Liang G, Zhen N, Lin H, Xiang H, et al. 2023. Establishment of an early warning list of SCI-indexed international journals with dual benefits for both scientists and publishers. *Publishing Research* 2:3 https://doi.org/10.48130/PR-2023-0003

### Introduction

The number of sci-tech periodicals has increased dramatically around the world over the last quarter of a century<sup>[1]</sup>, including many journals of guestionable guality and predatory journals<sup>[2-11]</sup>. This issue raises concerns for the academic community, policy-making and evaluation agencies. To avoid submitting to predatory journals, scientists usually choose journals that are included in widely accepted databases with journal impact factors, but many of these are considered to have highly inflated impact factors<sup>[12]</sup>. In the past decade, several large-scale retractions concerning research integrity and scholarly misconduct have occurred in the Chinese academic community, which may be influenced by the 'SCI worship' evaluation policy. For example, papers published only in SCI journals may be accepted for professional promotion or for personal incentives<sup>[13]</sup>. The biomedicine discipline in particular, is a strongly affected sector. The early warning policy is an important part of publishing ethics. Relevant work conducted abroad is represented by the DOAJ Whitelist, Beall's List, and Cabells' Journal Whitelist and Blacklist. DOAJ is an internationally renowned academic journal database and is currently the largest database in the world that includes only open access journals. Although there is a strict access mechanism, it is difficult to completely eliminate predatory journals due to the large volume of the database. Beall's List is a blog that documents cases of what Jeffrey Beall, a now-retired librarian at the University of Colorado Denver, Auraria Library, perceived as 'predatory' OA journals or publishers. Beall's influence was profound and international; however, this kind of personal behavior spurred legal threats and led to the eventual demise of Beall's blacklist in 2017. The Cabells' Journal Blacklist, launched in June 2017, contains over 10,000 predatory journals and continues to grow. It is the only database available for scholars to identify predatory journals, but it is currently not available for free and has low popularity.

In light of these circumstances, the Chinese government has presented multiple ordinances<sup>[14–16]</sup> to eliminate the 'intrinsic and extrinsic sources' of scholarly misconduct and has proposed establishing an early warning mechanism for academic journals. At the end of 2020, the National Science Library of the Chinese Academy of Sciences (CAS) released the *Early Warning List of International Journals (Trial)*<sup>[17]</sup> to guide scholars in selecting journals cautiously. Altogether, 65 journals involving over 10 disciplines were categorized into three risk levels, low,

<sup>&</sup>lt;sup>2</sup> Editorial Board of Chinese Journal of Burns and Wounds (Chinese Journal of Burns), Chongqing 400038, China

medium, and high risk. Among these, 26 medical-related journals were included.

In the current study, we analyzed 26 early warning SCIindexed medical journals in the CAS early warning list (EWL). We also sent a questionnaire to medical staff in burn fields across China to assess scholars' understanding and attitudes toward the policy of early warning journals, and the impact of the policy to provide a reference for international journal quality management.

## Methods

### **Characteristics of early warning SCI medical journals**

### Collection of indicators

Twenty-six early warning SCI-indexed medical journals on the EWL released by CAS at the end of 2020 were assessed with data such as the publisher, database inclusion, Journal Citation Reports (JCR) quartile, CAS quartile, open access (OA) or not, article processing charge, publication cycle, 2019 impact factor (IF), 5-year (2014–2018) IF, 5-year (2014–2018) self-citation rate, 2019 self-citation rate, global total number of articles published, proportion of articles authored by Chinese scholars in the past 5 years (2016–2020), and retractions in the past 5 years (2016–2020) to analyze the characteristics of these journals and to select characteristic indicators. These data were compared by category to determine the performance of the characteristic indicators and select the main indicators.

### Indicator collection method

Data were collected and verified from the Web of Science, Journal Citation Reports (JCR), and journal homepages.

After analyzing the main characteristics of early warning medical journals, the authors distributed questionnaires to experts, readers, and authors in the field of burn specialty in China to explore the applicability of early warning policies and whether there is common understanding of the main characteristics of early warning journals.

## Questionnaire for science researchers regarding the policy of 'early warning journals'

### Sources of investigation respondents

Members of the Chinese Burn Association, experts of the editorial board of the *Chinese Journal of Burns* (an authoritative journal on burn specialty), readers, and authors in approximately 30 provinces, autonomous regions, and direct municipalities across China were included.

### Questionnaire items

The items of the questionnaire were in three categories: (1) basic profiles of respondents, including age, sex, ethnicity, highest diploma, occupation, professional title, type of employer, and working years; (2) factors considered for article publication by the respondents; and (3) respondents' knowledge of the policy of 'early warning journals'.

### Methodology of investigation

There were a total of 21 questions in the questionnaire in the form of single-choice questions, multiple-choice questions, and single-line blank-filling questions. The investigation period was June 4–14, 2021. The questionnaire was a Medcon network questionnaire, where the participants clicked a web link through a mobile terminal or PC terminal and filled out the questionnaire anonymously. Logic setting was adopted to

ensure the integrity of the provided information. In addition, special personnel were assigned for review. If a stakeholder had any doubt, he or she could inquire to confirm the responses by means of phone calls or e-mails.

### **Statistical analysis**

SPSS23.0 was used to analyze data, and the Kolmogorov–Smirnov test was used to conduct the measurement data normal distribution test. In the test, nonnormally distributed data were expressed by the median quartile method and subjected to the nonparametric Kruskal–Wallis test and the Mann–Whitney *U* test. Enumeration data were expressed as frequency and composition ratio (%), and the chi-square test or Fisher's exact probability test was used for comparison between groups. The test level was  $\alpha = 0.05$ .

## Results

## Profiles of the medical journals in EWL

Among the 26 medical journals in EWL, four were at the 'high-risk level', 18 were at the 'medium-risk level', and four were at the 'low-risk level'. Five were from the publisher SPAN-DIDOS PUBL LTD ('medium-risk'), four were from the publisher E-CENTURY PUBLISHING CORP (two were 'high risk' and two were 'medium risk'), two were from the publisher SAGE PUBLI-CATIONS ('medium risk'), and two were from the publisher MDPI ('low risk'). Each of the remaining 13 publishers had one early warning SCI-indexed journal. Of the 26 journals, 23 were also included in PubMed, including three 'high-risk' journals, 17 'medium-risk' journals, and three 'low-risk' journals. In terms of the JCR guartile in 2020, four were in discipline Q1, 10 were in Q2, and six were in Q3 and Q4 according to their highest quartile. In terms of the CAS quartile in 2020, no journal was in discipline Q1, three were in Q2, nine were in Q3, and 14 were in Q4 according to the highest quartile. In terms of OA journals, 17 were OA journals, one was a non-OA journal, and eight were optional. All journals collected an article processing charge (the charges are published on their websites). In terms of publication cycle, two journals were semimonthly (24 editions a year), 17 were monthly (12 editions a year), one released 52 editions a year, one released nine editions a year, two were bimonthly (six editions a year), one released two editions a year, and two were annual. See Supplemental Table S1.

### **Representative indicators**

### Impact factor

Our statistics show that the 2019 IF of the 26 journals in EWL was 0.166–5.117 [2.58 (1.727–3.422)], among which 12 had an IF higher than 3, accounting for 46.1%. Except for *Journal of Clinical Medicine*, which was indexed by SCI for only 4 years, the 5-year (2014–2018) IF of the other 25 journals was 0.253–5.397 [2.42 (1.91–3.31)], among which 11 had an IF higher than 3, accounting for 44.0%. See Supplemental Table S2.

### Self-citation rates

Except for *Journal of Clinical Medicine*, which was indexed by SCI for only 4 years, the 5-year (2014–2018) self-citation rates of the 25 medical journals in EWL were 0.8%–22.4%, among which 22 had a self-citation rate lower than 10%, accounting for 88%; two had a self-citation rate between 10% and 20%, accounting for 8%; and only one was higher than 20%, accounting for 4%. The 2019 self-citation rates of the 26 medical journals in EWL

#### Analysis of early warning SCI medical journals

were 1.1%–31.4%, among which only two had a rate higher than 20%, accounting for 7.7%; three had a rate between 10% and 20%, accounting for 11.5%; 17 had a rate lower than 5%, accounting for 65.4%; and four had a rate between 5% and 10%, accounting for 15.4%. See Supplemental Table S2.

## Global total number of articles published and proportion of articles authored by Chinese scholars

Between 2016 and 2020, nine journals each published more than 1000 articles, which was the average value of the annual global total number of articles published by the 26 medical journals in EWL, accounting for 34.6%. Two journals exceeded the average value of 2,000 articles as the annual total number of articles published (with mean values of 4,109.6 and 4,310 articles, respectively). Between 2016 and 2020, the proportion of articles authored by Chinese scholars remained at a high level (18 journals) and witnessed a gradual increasing trend (six journals) among the 26 medical journals in EWL, except for the International Journal of Environmental Research and Public Health and the Journal of Clinical Medicine at lower levels. Nineteen out of 26 medical journals in EWL were characterized by an average 5-year proportion of articles authored by Chinese scholars over 50%, among which three journals had an average 5-year proportion higher than 90%. See Supplemental Table S2.

### Retraction of published papers

Between 2016 and 2020, only three journals had no retractions, 22 journals each had cumulative retractions of fewer than 50 articles (1–43 articles) and one journal, the *European Review for Medical and Pharmacological Sciences*, had 174 retractions in total (with a peak of 96 articles in 2020), among the 26 early warning SCI indexed medical journals. In addition, journals with more than 20 cumulative retractions included the *International Journal of Clinical and Experimental Pathology* (31 articles), the International Journal of Clinical and Experimental Medicine (21 articles), MEDICINE (43 articles, among which the peak was 13 articles retracted in 2020), Oncology Letters (41 articles, among which the peak was 15 articles retracted in 2020), Experimental and Therapeutic Medicine (25 articles), OncoTargets and Therapy (31 articles, among which the peak was 20 articles retracted in 2020), and LIFE SCIENCES (38 articles, among which the peak was 19 articles retracted in 2020). See Supplemental Table S2.

Follow-up analysis was conducted with the high proportions of articles authored by Chinese scholars, and the high prevalence of retractions was characteristic of the medical journals in EWL.

## Characteristics of early warning SCI indexed medical journals at different risk levels

There was no significant difference in the JCR quartile, CAS quartile, OA or not, 2019 IF, 5-year (2014–2018) IF, 2019 selfcitation rate, 5-year (2014–2018) self-citation rate, or 2016–2020 combined retraction rates of the journals among the high-risk, medium-risk, and low-risk levels (p > 0.05). There was a significant difference in the publication cycle, the 2016–2020 global total number of articles published, and the proportion of articles authored by Chinese scholars (p < 0.05). See Table 1. The high proportion of articles authored by Chinese scholars was a major characteristic.

## 'Early warning journals' questionnaire for the burn specialty group

#### Questionnaire recovery

In total, 424 valid questionnaires were recovered.

### Basic profiles of the respondents

The majority of respondents were male, aged 42.0 years on average (22.0–64.0), with the age group of 40 years or younger

Category	Option	Total	High risk (n = 4)	Medium risk (n = 18)	Low risk (n = 4)	X²/H	P value
JCR quartile	Q1	4	0	3	1	3.888	0.692
	Q2	10	1	7	2		
	Q3	6	1	5	0		
	Q4	6	2	3	1		
CAS quartile	Q2	3	0	2	1	5.096	0.278
	Q3	9	0	7	2		
	Q4	14	4	9	1		
Whether OA	No	1	0	1	0	3.160	0.531
	Optional	8	0	7	1		
	Yes	17	4	10	3		
Publication cycle	<12 editions/year	6	0	5	1	10.138	0.038
	= 12 editions/year	17	3	13	1		
	>12 editions/year	3	1	0	2		
2019 IF	Med (P25–P75)	2.58(1.727-3.422)	0.902(1.88-2.656)	2.705 (1.997-3.713)	3.076(0.899-3.561)	4.343	0.114
5-year (2014–2018) IF	Med (P25–P75)	2.42 (1.91–3.31)	1.59 (0.76–2.34)	2.71 (2.01-3.65)	2.84(0.83-3.41)	3.169	0.205
Global total number of articles published between 2016 and 2020	Med (P25–P75)	3 603.5 (1 134.5–7 006.25)	7 760 (4 939.5–18 604.75)	3 086.5 (858–5 088.5)	5 438.5 (2 469–17 201.75)	7.078	0.029
Proportion of articles authored by Chinese scholars between 2016 and 2020	Med (P25–P75)	74.3 (54.95–86.7)	83.97 (68.07–94.33)	74.94 (61.79–86.7)	37.53 (12.27–54.06)	9.004	0.011
2016-2020 Combined retraction rate	Med (P25–P75)	0.33(0.08–0.71)	0.44(0.2–2.44)	0.33(0.06-0.61)	0.46(0.05-0.97)	1.152	0.562
5-year (2014–2018) self- citation rate	Med (P25–P75)	0.03 (0.01–0.43)	0.03 (0.01–0.15)	0.03 (0.01–0.04)	0.03 (0.01–0.11)	0.446	0.800
2019 self-citation rate	Med (P25–P75)	0.04 (0.02-0.07)	0.06 (0.04-0.21)	0.03 (0.02-0.05)	0.08 (0.04-0.16)	4.832	0.089

CAS is Chinese Academy of Sciences; The sample size of 2019 IF and self-citation rate are 26. The sample size of the 5-year (2014–2018) IF and the 5-year (2014–2018) self-citation rate are 25 during 2016 to 2020 M (P25, P75).

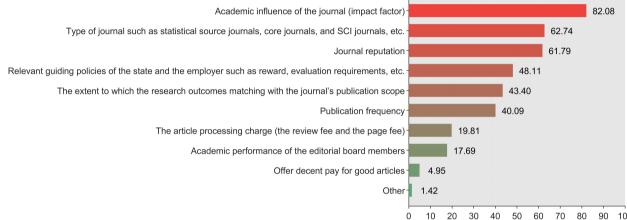
accounting for the highest proportion. The majority were of Han ethnicity. The highest education levels were a master's degree and a doctorate degree, the majority had a senior professional title, and the employers were mainly colleges and universities, research institutes, and teaching hospitals. The mean value of the respondents' working years was 17.00 years (1.0–40.0 years), with the majority having either no more than 10 years or over 20 years of experience. The most common occupation type was clinical doctor. See Supplemental Table S3.

# Factors considered by the 424 respondents for article publication

The main factors considered for article publication were, according to ranking, the academic influence of the journal (impact factor), the type of journal (such as statistical source journal, core journal, or SCI indexed journal), journal reputation, and the relevant guiding policies of the state and the employer (such as reward and evaluation requirements). See Fig. 1.

## Respondents' awareness of the policy of early warning journals

In most cases, the respondents' awareness level was 'know and understand a little bit'. For the list of early warning journals, it was 'know the EWL but don't know the specific journals' in most cases; for the impact of the list on journal selection, it was 'have impact to some extent' in most cases; for the effect of EWL on boosting research integrity, it was 'have some effect' in most cases; for the effect of EWL on improving journal quality management, it was 'have some effect' in most cases; for the impact of EWL on the desire to publish research outcomes, it was 'have some impact' in most cases; for the impact of EWL on choosing Chinese journals as the first choice, it was 'yes, will consider' in most cases. See Table 2.



0 10 20 30 40 50 60 70 80 90 100 Proportion of factors considered by the 424 investigation objects for article publication(%)

### Fig. 1 Factors considered by the 424 respondents for article publication.

Category	Option	Number (persons)	Ratio (%)	
Awareness of the policy of early warning journals	Don't know	86	20.3	
	Know but don't understand	101	23.8	
	Know and understand a little bit	171	40.3	
	Know and understand a lot	66	15.6	
Whether know the EWL or not	Don't know the EWL	98	23.1	
	Know the EWL but don't know the specific journals	213	50.2	
	Know the EWL and know the journals on the list	113	26.7	
Will EWL affect the article submission choice?	No	54	12.7	
	Won't consider the journals on the EWL at all	167	39.4	
	Yes, to some extent	203	47.9	
The effect of EWL on boosting research integrity	No effect	10	2.4	
	Obvious effect	166	39.2	
	Some effect	248	58.5	
The effect of EWL on improving journal quality management	No effect	4	0.9	
	Some effect	241	56.8	
	Obvious effect	86 101 171 66 98 213 113 54 167 203 10 166 248 4	42.2	
The impact of EWL on the desire to publish research outcome	No impact	114	26.9	
	Some impact	240	56.6	
	Obvious impact	70	16.5	
The impact of EWL on selecting Chinese journals as the first choice	•	63	14.9	
	Yes, will consider	317	74.8	
	Yes, first choice	44	10.4	

EWL is Early Warning List.

#### Analysis of early warning SCI medical journals

The main factors for early warning of journals were, according to ranking, low academic quality of journals, a high self-citation rate, the relationship with retractions, and a high proportion of articles authored by Chinese scholars. See Fig. 2.

### Discussion

## Scholars should be cautious in choosing journals with a high proportion of Chinese papers and retraction

Among the 26 early warning SCI indexed medical journals released by CAS at the end of 2020, the characteristics are high proportions of articles authored by Chinese scholars and widespread retractions. Table 1 shows that journals at the 'high-risk level' had the largest total number of articles published and the highest proportion of articles authored by Chinese scholars, which is in line with the risk level. The total number of articles published in journals at the 'low-risk level' was higher than that of journals at the 'medium-risk level', whereas the proportion of articles authored by Chinese scholars was lower than that of 'medium-risk' journals, in line with the risk level. Therefore, a high proportion of articles authored by Chinese scholars was the main characteristic of warning journals. Retraction is essentially self-purification aimed at defending academic truth and integrity<sup>[18]</sup>. However, it is treated cautiously by publishers because it causes ethical problems related to publication<sup>[19]</sup>. With regard to cases with a large number of retractions, the journal European Review for Medical and Pharmacological Sciences retracted nearly 200 articles in 5 years and 96 articles in 2020 alone, and MEDICINE, Oncology Letters, OncoTargets and Therapy, and LIFE SCIENCES had retractions that reached a peak in 2020. There is no doubt that problems of research integrity and publication ethics may have emerged. These constitute the reasons that some journals are put on the EWL.

#### Applicability of the early warning journal policy

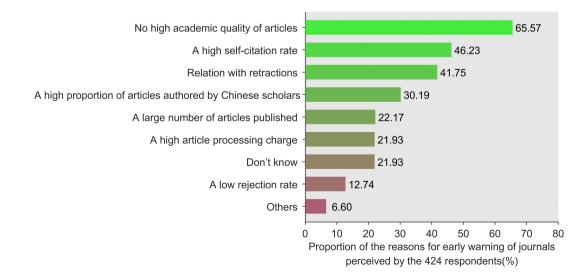
Figure 1 and Table 2 show that the main factors that the respondents considered for article publication included journal reputation; more than four-fifths (87.3%) of the respondents stated that EWL had an impact on their article submission choices, and almost all respondents believed that early

warning of journals had an effect on boosting research integrity (97.7%) and improving journal quality management (99.1%). All of these findings suggest that scholars accept the mechanism of early warning journals, and this mechanism has good prospects for promotion.

As Fig. 2 shows, according to the respondents, the main reasons for some journals being put on the EWL included a high proportion of articles authored by Chinese scholars, retractions, and high self-citation rates. The high proportions of articles authored by Chinese scholars and retractions were in line with the characteristic indicators of medical journals in EWL stated in 4.1, which means there is common ground between the perceptions of the respondents and the early warning analysis of the evaluation institutions. High self-citation rates were chosen as one of the main reasons why journals were included in the EML in Fig. 2, which indicates that scholars are aware of normative academic communication.

As Table 3 shows, 1) two high-risk journals on the 2020 warning list, namely, the International Journal of Clinical and Experimental Pathology and the International Journal of Clinical and Experimental Medicine, with 90% Chinese authors in 2019 and 2020, were delisted from the SCI database in 2021; 2) two medium-risk journals on the 2020 warning list, namely, the American Journal of Translational Research and the Journal of Biomaterials and Tissue Engineering, with 90% Chinese authors during 2019–2022, were still on the warning list issued in 2023; 3) the average Chinese author rate is relatively high for the 2020 low-risk journal Acta Medica Mediterranea, with an annual average of over 80%, and shows an upward trend during 2019-2022; it is still listed in the EWL issued in 2023, and the early warning level has been upgraded to medium-risk; and 4) the rate of Chinese authors of other journals on the 2020 warning list showed a general downward trend during 2019–2022.

In addition, six journals appear repeatedly on the 2021 and 2020 lists, three are repeated on the 2020 and 2023 lists, and most repeated journals have a high rate of Chinese authors. Furthermore, "he high rate of Chinese authors' is the main feature of early warning medical journals. After being warned, the journal is either delisted from the SCI index or continues to be monitored, or it improves on the basis of the 'high Chinese



**Fig. 2** Reasons for early warning of journals perceived by the 424 respondents.

#### Table 3. Data of Published articles in 26 warning medical journals from 2019 to 2022.

	Number of articles published								
Journal name	Warning	2019		2020		2021		2022	
	level	Total	Chinese scholars n(%)						
European Review for Medical and Pharmacological Sciences	High	1375	1129(82%)	1614	1221(76%)	1001	380(38%)	1186	313(26%)
International Journal of Clinical and Experimental Pathology	High	514	468(91%)	384	336(88%)	-	-	-	-
Medicine	High	4689	2897(62%)	5292	3537(67%)	4583	2689(59%)	4079	2132(52%)
International Journal of Clinical and Experimental Medicine	High	1703	1643(96%)	1222	1185(97%)	-	-	-	-
Biomedicine & Pharmacotherapy	Medium	1431	987(69%)	1338	995(74%)	1603	700(44%)	1422	701(49%)
Experimental and Molecular Pathology	Medium	122	60(49%)	174	88(51%)	114	51(45%)	74	31(42%)
Brazilian Journal of Medical and Biological Research	Medium	150	79(53%)	148	90(61%)	184	82(45%)	108	23(21%)
Cancer Biomarkers	Medium	149	113(76%)	163	119(73%)	130	82(63%)	147	70(48%)
International Journal of Immunopathology and Pharmacology	Medium	64	27(42%)	69	37(54%)	114	38(33%)	90	35(39%)
Oncology Research	Medium	117	111(95%)	95	74(78%)	36	22(61%)	16	8(50%)
American Journal of Cancer Research	Medium	206	152(74%)	320	222(69%)	400	220(55%)	380	225(59%)
Medical Science Monitor	Medium	1126	996(88%)	982	895(91%)	535	412(77%)	352	219(62%)
Oncology Letters	Medium	1509	1178(78%)	1196	924(77%)	845	573(68%)	466	252(54%)
Experimental and Therapeutic Medicine	Medium	1271	1069(84%)	1261	989(78%)	1485	1058(71%)	757	479(63%)
OncoTargets and Therapy	Medium	1075	960(89%)	1170	1057(90%)	521	391(75%)	191	61(32%)
Oncology Reports	Medium	608	440(72%)	436	332(76%)	378	229(61%)	219	74(34%)
Molecular Medicine Reports	Medium	1172	1066(91%)	846	740(87%)	876	721(82%)	370	248(67%)
International Journal of Molecular Medicine	Medium	455	351(77%)	379	303(80%)	288	231(80%)	147	80(54%)
Journal of International Medical ReSearch	Medium	888	685(77%)	1271	1026(81%)	995	759(76%)	596	333(56%)
American Journal of Translational Research	Medium	636	576(91%)	644	589(91%)	1479	1391(94%)	752	672(89%)
Journal of Biomaterials and Tissue Engineering	Medium	259	236(91%)	280	270(96%)	346	334(97%)	326	310(95%)
Aging-US	Medium	889	546(61%)	1620	1252(77%)	1580	1272(81%)	658	441(67%)
LIFE SCIENCES	Low	908	484(53%)	1300	713(55%)	1320	576(44%)	817	208(25%)
Journal of Clinical Medicine	Low	2230	31(1%)	4133	39(1%)	5986	67(1%)	7535	517(7%)
International Journal of Environmental Research and Public Health	Low	5164	1376(27%)	9594	1728(18%)	13429	1857(14%)	17089	4099(24%)
Acta Medica Mediterranea	Low	555	409(74%)	607	485(80%)	629	505(80%)	623	555(89%)

author rate', indicating that the EWL is applicable, recognized by the academic community, and has achieved significant results.

### Limitations

Limited by study time and resources, this study could not investigate all burn specialty professionals across China<sup>[20]</sup>. Nevertheless, we collected samples from approximately 30 provinces, autonomous regions, and direct municipalities of China. The participants were experts, ordinary doctors, and nurses of the burn specialty, and their attitude was representative of the attitude of the entire burn specialty field toward the policy of early warning journals. We hope that in the future, scitech workers and science editors from more disciplines will join this study series so that we can provide comprehensive practical statistics on the Chinese policy of early warning journals worldwide.

### **Future perspectives**

Many similar blacklists or whitelists have been identified, namely, Beall's List, Cabells' Journal Blacklist, and DOAJ inclusion, but each has its limitations. The annual EWL released by CAS has aroused wide public concern since 2020. The influence of these lists clearly illustrates the importance of the role of blacklists in the academic universe. Based on the mentioned works, we propose to establish a global warning alliance to fulfill the pressing need for information on predatory and questionable quality publishing, integrate and unify the warning monitoring indicators, and regularly update and release the EWL with peer experts' comments for free to provide a reference when choosing journals and quality control standards for journal management.

### Conclusions

The EWL released by the CAS has attracted widespread attention in the academic world. From our analysis, the medical journals in EWL released by CAS are characterized by a high proportion of articles from China as well as a high rate of retraction. The questionnaire results showed that most burn specialty scholars believe that the establishment of such a list is beneficial to enhancing research integrity and improving journal quality management as well as for selecting journals for publication. The EWL can provide important practical data for the 'global alliance of early warning journals' in the future.

### **Conflict of interest**

The authors declare that they have no conflict of interest.

Supplementary Information accompanies this paper at (https://www.maxapress.com/article/doi/10.48130/PR-2023-0003)

### Dates

Received 17 January 2023; Accepted 13 June 2023; Published online 19 July 2023

### References

- 1. UNESCO. 2015. UNESCO science report: towards 2030. Report. Paris: Unesco publishing.
- 2. Beall J. 2015. Predatory journals and the breakdown of research cultures. *Information Development* 31(5):473–76
- 3. Butler D. 2013. Investigating journals: the dark side of publishing. *Nature* 495(7442):433–35
- 4. Clark J, Smith R. 2015. Firm action needed on predatory journals. BMJ 350:h210
- Jalalian M, Mahboobi J. 2014. Hijacked journals and predatory publishers: is there a need to re-think how to assess the quality of academic research? Walailak Journal of Science and Technology 11(5):389–94
- Jalalian M, Dadkhah M. 2015. The full story of 90 hijacked journals from August 2011 to June 2015. *Geographica Pannonica* 19(2):73–87
- Shamseer L, Moher D, Maduekwe O, Turner L, Barbour V, et al. 2017. Potential predatory and legitimate biomedical journals: can you tell the difference? A cross-sectional comparison BMC Medicine 15:28
- Sorokowski P, Kulczycki E, Sorokowska A, Pisanski K. 2017. Predatory journals recruit fake editor. *Nature* 543(7646):481–83
- Seethapathy GS, Kumar JUS, Hareesha AS. 2016. India's scientific publication in predatory journals: need for regulating quality of Indian science and education. *Current Science* 111(11):1759–64
- 10. Djuric D. 2015. Penetrating the omerta of predatory publishing: the romanian connection. *Science and Engineering Ethics* 21(1):183–202
- Bagues M, Sylos-Labini M, Zinovyeva N. 2019. A walk on the wild side: 'Predatory' journals and information asymmetries in scientific evaluations. *Research Policy* 48(2):462–77

- Björk BC. 2018. Evolution of the scholarly mega-journal, 2006–2017. Peer J 6:e4357
- 13. Yang Z. 2018. Analysis on the Withdrawal of Papers in Academic Misconduct. *Science-Technology & Publication* 37(10):165–69
- General Office of the CPC Central Committee General Office of the State Council. 2017. Opinions on Deepening the Reform of the Professional Title System. (In Chinese) www.gov.cn/xinwen/2017-01/08/content\_5157911.htm#1
- 15. General Office of the CPC Central Committee General Office of the State Council. 2018. Some Opinions on Further Strengthening the Construction of Scientific Research Integrity. (In Chinese) www.gov.cn/ xinwen/2018-05/30/content\_5294938.htm
- Ministry of Science and Technology. 2020. Notice on Several Measures to Eliminate the Bad Orientation of "Thesis Only" in Scientific and Technological Evaluation (Trial). (In Chinese) www.most.gov. cn/xxgk/xinxifenlei/fdzdgknr/fgzc/gfxwj/gfxwj2020/202002/t2020 0223\_151781.html
- 17. Periodical Division Table Team of Document and Information Center of Chinese Academy of Sciences. 2020. Official website of international journal early warning list (trial) (In Chinese). https://earlywarning.fenqubiao.com
- 18. Li D. 2021. Is it an academic stain to withdraw the manuscript? (In Chinese). www.sciencenet.cn/skhtmlnews/2021/7/4501.html
- Li Y, Xu S, Fang W, Wang W. 2021. Publishing ethics and solutions derived from withdrawal of academic journal. *Acta Editologica* 33(2):176–78
- Feng Z, Zheng Y, You C, Jin Y, Wang X, et al. 2015. Basic investigation into the present burn care system in China: burn units, doctors, nurses, beds and special treatment equipment. *Burns* 41(2):279–88

Copyright: © 2023 by the author(s). Published by Maximum Academic Press, Fayetteville, GA. This article is an open access article distributed under Creative Commons Attribution License (CC BY 4.0), visit https://creativecommons.org/licenses/by/4.0/.