



Proposal for greater balance and inclusion in ranking nuclear medicine journals

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Nuclear medicine journals (NMJs) are usually ranked in the category of radiology, nuclear medicine and imaging by the two largest citation indices, the Web of Science (WoS) and Scopus (https://www.researchgate.net/publication/342803832_2020_Latest_Impact_Factor_Clarivate_Analytics_Journal_Citation_Reports_Release_of_JCR_Thomson_Reuters, https://www.scimagojr.com/journalrank.php?category=2741&page=4&total_size=335); however, these two indices sometimes produce quite discrepant rankings due to the different algorithms used for calculating their rankings. For example, the Clinical Nuclear Medicine journal is ranked third out of 17 NMJs ranked by WoS in 2019 but drops to the eleventh position out of the 29 NMJs ranked by Scopus in the same year. In contradistinction, the European Journal of Nuclear Medicine and Molecular Imaging Physics is ranked fourth by the Scopus while it drops to the tenth position on the WoS listing. While the WoS ranking is widely recognized, Scopus index is more inclusive, ranking a larger number of journals, which is especially helpful for up-and-coming journals and those from developing countries. We propose a potential ranking method

of NMJ combining the WoS and Scopus rankings for 2019 (https://www.researchgate.net/publication/342803832_2020_Latest_Impact_Factor_Clarivate_Analytics_Journal_Citation_Reports_Release_of_JCR_Thomson_Reuters, https://www.scimagojr.com/journalrank.php?category=2741&page=4&total_size=335).

According to the proposed ranking, the NMJs are first ranked according to each database separately followed by calculating the average of the two ranks for each journal to determine the new “combined rank” (Table 1). For those NMJ ranked by Scopus but not WoS, a WoS rank for all unranked NMJ that is one rank higher than the lowest WoS rank is used. For example, 29 NMJs are currently ranked by Scopus while only 17 by WoS. Thus, all 12 NMJs unranked by WoS will receive a WoS rank of 18 enabling the calculation of generally low average rank reflecting the unranked status by WoS. While this approximation may underestimate the true merit of a Scopus-ranked/WoS-unranked journal, this approach is sufficiently simple, transparent, and perhaps even objective in the absence of large studies

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Table 1 Proposed balanced ranking of nuclear medicine journals based on combined Web of Science (WoS) and Scopus rankings

Journal combined rank (2019)	Journal	Scopus rank (2019)	WoS rank (2019)	Average rank (2019)
1 (tie)	European Journal of Nuclear Medicine and Molecular Imaging	1	2	1.5
1 (tie)	Journal of Nuclear Medicine	2	1	1.5
3	Seminars in Nuclear Medicine	5	4	4.5
4	Molecular Imaging and Biology	7	6	6.5
5 (tie)	Clinical Nuclear Medicine	11	3	7
5 (tie)	Journal of Nuclear Cardiology	9	5	7
5 (tie)	EJNMMI Research	6	8	7
5 (tie)	EJNMMI Physics	4	10	7
9 (tie)	Molecular Imaging	10	7	8.5
9 (tie)	Annals of Nuclear Medicine	8	9	8.5
11	American Journal of Nuclear Medicine and Molecular Imaging	3	Unranked	10.5
12	Nuclear Medicine and Biology	13	11	12
13	Cancer Biotherapy and Radiopharmaceuticals	14	12	13
14	Nuclear Medicine Communications	15	14	14.5
15	Clinical and Translational Imaging	12	Unranked	15
16	Quarterly Journal of Nuclear Medicine and Molecular Imaging	18	13	15.5
17 (tie)	Nuklearmedizin-Nuclear Medicine	19	15	17
17 (tie)	PET clinics	16	Unranked	17
19	Nuclear Medicine Molecular Imaging	17	Unranked	17.5
20	Journal of Radioanalytical and Nuclear Chemistry	20	Unranked	19
21	Molecular Imaging and Radionuclide Therapy	21	Unranked	19.5
22 (tie)	Hellenic Journal of Nuclear Medicine	24	16	20
22 (tie)	Nuclear Medicine Review	22	Unranked	20
24	Journal of Nuclear Medicine Technology	23	Unranked	20.5
25	Journal of Medical Imaging and Radiation Sciences	25	Unranked	21.5
26	Egyptian Journal of Radiology and Nuclear Medicine	26	Unranked	22
27	Iranian Journal of Nuclear Medicine	27	Unranked	22.5
28 (tie)	Médecine Nucléaire	29	17	23
28 (tie)	Indian Journal of Nuclear Medicine	28	Unranked	23

comparing the attributes of both rankings against a “gold standard.”

The proposed combined ranking will have some advantages. Rather than having ~40% of NMJs without any rank by the widely used WoS, every NMJ will now receive a rank even if it is sometimes mostly derived from the Scopus rank. This places several WoS-unranked journals in the second or third quartile of the new ranking and could prove beneficial to NMJs from developing countries where journals remain WoS-unranked for a considerable period of time; any improvement in their SCOPUS ranking will automatically lead to an improved combined ranking that could attract higher quality submissions and subsequently improve their citation impact.

We believe that our proposed ranking approach will be beneficial to all parties involved—readership, authors, and NMJs.

Declarations

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