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# Payments by Drug and Medical Device Manufacturers to US Peer Reviewers of Major Medical Journals

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Although conflicts of interest of journal editors and authors have been investigated,<sup>1,2</sup> the traditionally opaque nature of peer review has hindered their evaluation among peer reviewers, despite their crucial role in academic publishing. While most journals have established conflict of interest policies for authors, fewer extend these policies to peer reviewers.<sup>3</sup> In many cases, journals or editors may inquire about reviewer conflicts of interest and consider these while managing the peer review process, although publicly available reviewer conflict of interest disclosures are rare. Reviewers of leading medical journals may have industry ties due to their academic expertise.

We sought to characterize payments by drug and medical device manufacturers to US peer reviewers of major medical journals.

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We identified peer reviewers for *The BMJ*, *JAMA*, *The Lancet*, and *The New England Journal of Medicine* (*NEJM*) using each journal's 2022 reviewer list. These journals were selected for their high impact factor and reputation as leading publications of original general medical research. Because reviewer lists did not include affiliations, identification was conducted using Scopus and the National Plan and Provider Enumeration System, which also provided sex and specialty information. We limited our cohort to US-based physicians due to use of the Centers for Medicare & Medicaid Services Open Payments database. Two independent abstractors (A.-L.N., L.M.) performed the search strategy for each reviewer, with discrepancies resolved by a third author (D.-D.N.).

We extracted general and research payments to the identified peer reviewers between 2020 and 2022 from the Open Payments database, capturing payments from drug and medical device manufacturers to US-licensed physicians.<sup>4</sup> We excluded ownership and investment interests because they are not equivalent to financial transfers and are less reliable than other general payments. Research payments included payments to individual physicians and institutional payments for research where they served as principal investigators. Institutional payments were divided by the number of principal investigators. Inflation-adjusted payment amounts in 2022 US dollars were calculated among those receiving payments.

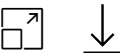
We compared industry payments by sex and specialty using the Mann-Whitney *U* test and Kruskal-Wallis test with subsequent Dunn pairwise testing accounting for multiple testing, respectively. Analyses were performed using Stata MP version 17.0 (StataCorp). Statistical significance was defined as a 2-sided *P* < .05.

Ethics review was not required based on University of Toronto policy. Additional methods are available in the eAppendix in [Supplement 1](#).

## Results

Among 7021 reviewer names, including duplicates, we excluded 332 reviewers who were not searchable in Scopus, 3257 non-US reviewers, and 1325 nonphysicians. This left 1962 unique reviewers, of whom 145 (7.4%) had performed peer reviews for more than 1 journal.

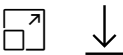
Between 2020 and 2022, 1155 peer reviewers (58.9%) received at least 1 industry payment ([Table 1](#)). More than half (54.0%) of reviewers accepted general payments, while 31.8% received research payments.



**Table 1. Industry Payments to US Physician Peer Reviewers (N = 1962) From 4 Major Medical Journals, 2020-2022**

Reviewers received \$1.06 billion in industry payments between 2020 and 2022, including \$1.00 billion (94.0%) to individuals or their institutions and \$64.18 million (6.0%) in general payments. Consulting fees and speaking compensation unrelated to continuing medical education programs accounted for \$34.31 million and \$11.80 million, respectively. Over the 3 years, the median general payment was \$7614 (IQR, \$495-\$43 069) and the median research payment was \$153 173 (IQR, \$29 307-\$835 637) among reviewers receiving such payments.

Male reviewers had significantly higher median total payments (\$38 959 vs \$19 586) and general payments (\$8663 vs \$4183) than female reviewers. Statistically significant differences in payments existed between specialties ([Table 2](#)).



**Table 2. Industry Payments to US Physician Peer Reviewers, 2020-2022, by Reviewer Sex and Specialty**

[Industry Payments to US Physician Peer Reviewers, 2020-2022, by Reviewer Sex and Specialty](#)

## Discussion

More than half of the 1962 US physicians included in this study who peer reviewed for the most influential medical journals received industry payments in 2020-2022, with most payments for research. Research payments, especially those provided to an institution, may have different implications than general payments for conflicts of interest. Peer reviewers in this study received \$64.18 million in general payments between 2020 and 2022, representing a median general payment of \$7614, larger than the median general payment to all physicians in 2018 of \$216.<sup>5</sup> Additional research and transparency regarding industry payments in the peer review process are needed. Limitations include that it was not known if existing relationships were relevant to the reviewed articles; that reviewers who were not US-based physicians and payments from other entities such as insurance and technology companies were not captured, underestimating industry payments to reviewers of these major journals; and that the findings may not be generalizable to other journals.

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**Author Contributions:** Dr D.-D. Nguyen and Mr Murayama had full access to all the data in the study and take responsibility for the integrity of the data and the accuracy of the data analysis. Dr D.-D. Nguyen and Mr Murayama contributed equally.

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*Acquisition, analysis, or interpretation of data:* All authors.

*Drafting of the manuscript:* D.-D. Nguyen, Murayama, A.-L. Nguyen.

*Critical review of the manuscript for important intellectual content:* All authors.

*Statistical analysis:* D.-D. Nguyen, Murayama, Wallis.

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*Supervision:* D.-D. Nguyen, Satkunasivam, Wallis.

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**Data Sharing Statement:** See [Supplement 2](#).

## References



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2017;359:j4619. doi:[10.1136/bmj.j4619](https://doi.org/10.1136/bmj.j4619)

[PubMed](#) | [Google Scholar](#) | [Crossref](#)

2. Baraldi JH, Picozzo SA, Arnold JC, Volarich K, Gionfriddo MR, Piper BJ. A cross-sectional examination of conflict-of-interest disclosures of physician-authors publishing in high-impact US medical journals. *BMJ Open*. 2022;12(4):e057598. doi:[10.1136/bmjopen-2021-057598](https://doi.org/10.1136/bmjopen-2021-057598)  
[PubMed](#) | [Google Scholar](#) | [Crossref](#)
3. Cooper RJ, Gupta M, Wilkes MS, Hoffman JR. Conflict of interest disclosure policies and practices in peer-reviewed biomedical journals. *J Gen Intern Med*. 2006;21(12):1248-1252. doi:[10.1111/j.1525-1497.2006.00598.x](https://doi.org/10.1111/j.1525-1497.2006.00598.x)  
[PubMed](#) | [Google Scholar](#) | [Crossref](#)
4. Centers for Medicare & Medicaid Services. Open Payments. Accessed June 1, 2024.  
<https://openpaymentsdata.cms.gov/>
5. Marshall DC, Tarras ES, Rosenzweig K, Korenstein D, Chimonas S. Trends in industry payments to physicians in the United States from 2014 to 2018. *JAMA*. 2020;324(17):1785-1788. doi:[10.1001/jama.2020.11413](https://doi.org/10.1001/jama.2020.11413)  
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