

Obtaining retrospective Open Access publishing: the Shire experience

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Abstract

Objective In January 2018, Shire introduced a policy mandating that all publications derived from Shire-funded research be submitted to journals that offer public availability via Open Access (OA). As a further commitment to open science, manuscripts from Shire-sponsored research published from January 2015 to December 2017 were identified to be retrospectively converted to OA preferably under the least restrictive CC-BY license.

Research design and methods Publishers of the identified articles were approached to determine the feasibility and costs of converting those published articles to a CC-BY license. Each publisher

was asked to confirm retrospective OA policy and license availability for both commercial and non-commercial research funders.

Results Twenty-four publishers of 148 articles identified were approached. Fifty-eight percent of these articles were published by three of the largest medical publishers: Elsevier, Springer Nature and Wiley. Ten publishers allowed 41 published articles to be converted retrospectively to a CC-BY license (35 manuscripts), or a CC-BY-NC-ND or CC-BY-NC license (6 manuscripts). Of these 41 conversions, 25 were offered free of charge while 16 articles required additional fees, sometimes

including page charges: >\$8,000/manuscript for 3 manuscripts, from >\$5,000 to \$8,000/manuscript for 4 manuscripts, and from >\$2,000 to \$5,000/manuscript for 9 manuscripts.

Conclusions Despite there being a growing OA and open science movement, we were able to secure retrospective OA for just over a quarter of the identified manuscripts. We saw a range of responsiveness from publishers, with smaller publishers being more amenable and easier to work with. Fees ranged widely, with fees charged by some publishers proving too costly for us to proceed.

Background

- Open Access (OA) refers to the practice of providing online access to information that allows readers and users to copy, use, distribute, transmit and display the work publicly and to make and distribute derivative works, in any digital medium for any responsible purpose, subject to proper attribution of authorship.¹
- Definitions of OA have been proposed by the 2002 Budapest Declaration,² the 2003 Berlin Declaration³ and the Bethesda Statement on Open Access Publishing,⁴ and usage rights are often granted by specific Creative Commons (CC) attributions.⁵
- Many funders of scientific research (e.g. the Wellcome Trust,⁶ The Royal Society,⁷ the Bill & Melinda Gates Foundation,⁸ and the European Research Council⁹) stipulate that the research they fund must be published with OA.
- In January 2018 Shire became the first biopharma company to introduce an OA policy requiring submission of manuscripts resulting from all Shire-funded research to journals that offer public availability via OA (including publisher platforms/repositories and self-archiving).
- Additionally, Shire encouraged publication using the generic CC Attribution 4.0 license (CC-BY 4.0) or equivalent license whenever possible, with or without an embargo period, over more restrictive Creative Commons licenses such as CC-BY-NC, CC-BY-NC-ND or others.



Objectives

- To further demonstrate Shire's commitment to open science, Shire conducted an evaluation of company-sponsored research articles published from January 2015 to December 2017. A list of the most impactful manuscripts, as determined by the respective publication teams, was developed. Public availability of those manuscripts was determined and the feasibility of either conversion to OA or attribution to a broader CC license was evaluated.

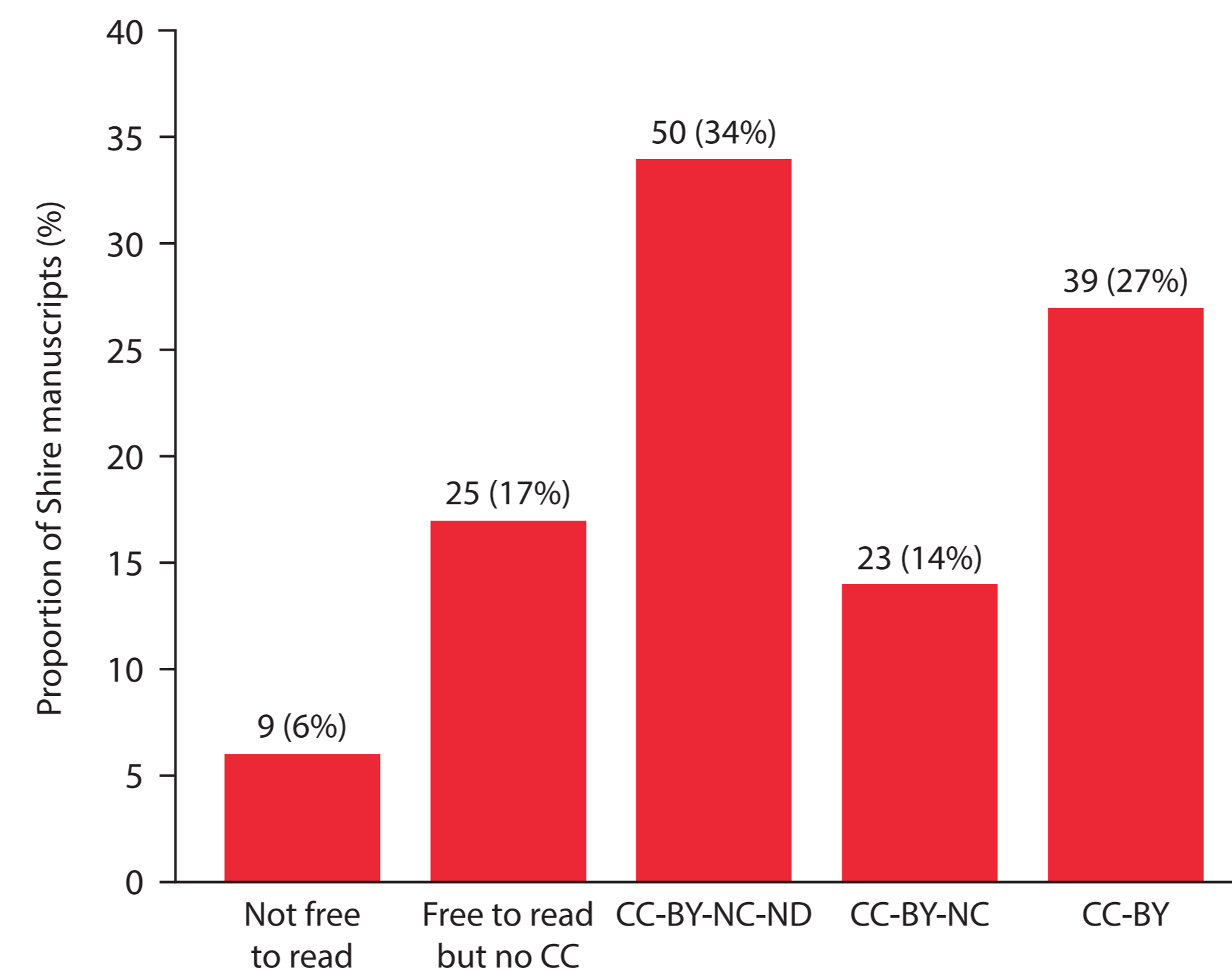
Research design and methods

- A list of scientific manuscripts published in peer-reviewed journals from January 2015 to December 2017 was established by the various Shire publication teams using the electronic publications repository Datavision™ (version 6.1.1; Envision Pharma Group).
- The public availability of these manuscripts was determined.
- For all manuscripts that were not OA under a CC-BY license, individual publishers were asked to confirm their policy on providing retrospective OA for published articles and also the CC licences available for articles supported by commercial and non-commercial sources of funding.

Results

- Overall, 148 manuscripts were originally identified within Shire's electronic publications repository.
 - One hundred and thirty-seven manuscripts were, in some form, free to read, including 25 published in journals such as *Blood*, *The Journal of the American Medical Association* or *The New England Journal of Medicine* that make their article free to read either on their website or in PubMed at some time following an embargo period.
 - Of those, 39 manuscripts were published with CC-BY (**Figure 1**).
 - Thirty-four manuscripts were copyrighted by the publisher and not OA via any form of OA license. However, 25 of those articles were free to read on the publishers' websites.
 - Two unpublished articles were erroneously included in our original data set but were excluded from the data presented here.
- A total of 146 manuscripts were published by 24 individual publishers. Publishers of manuscripts not published under a CC-BY license were contacted and asked about the possibility of converting the identified manuscripts to OA, preferably under CC-BY.
- Ninety-eight manuscripts (67%) were published by the four largest medical publishers, by volume of publications (**Table 1**).
- While all publishers understood OA and the CC structure and could direct us to the most appropriate personnel or department(s), there was a range of response times with an average overall time to final decision of 40 days (**Table 2**).

Figure 1. Number (percentage) of Shire manuscripts based on CC license originally offered and chosen.



CC, Creative Commons.

Figure 2. Proportion of manuscripts for which a CC-BY license was applied at the time of publication and offered after inquiry.

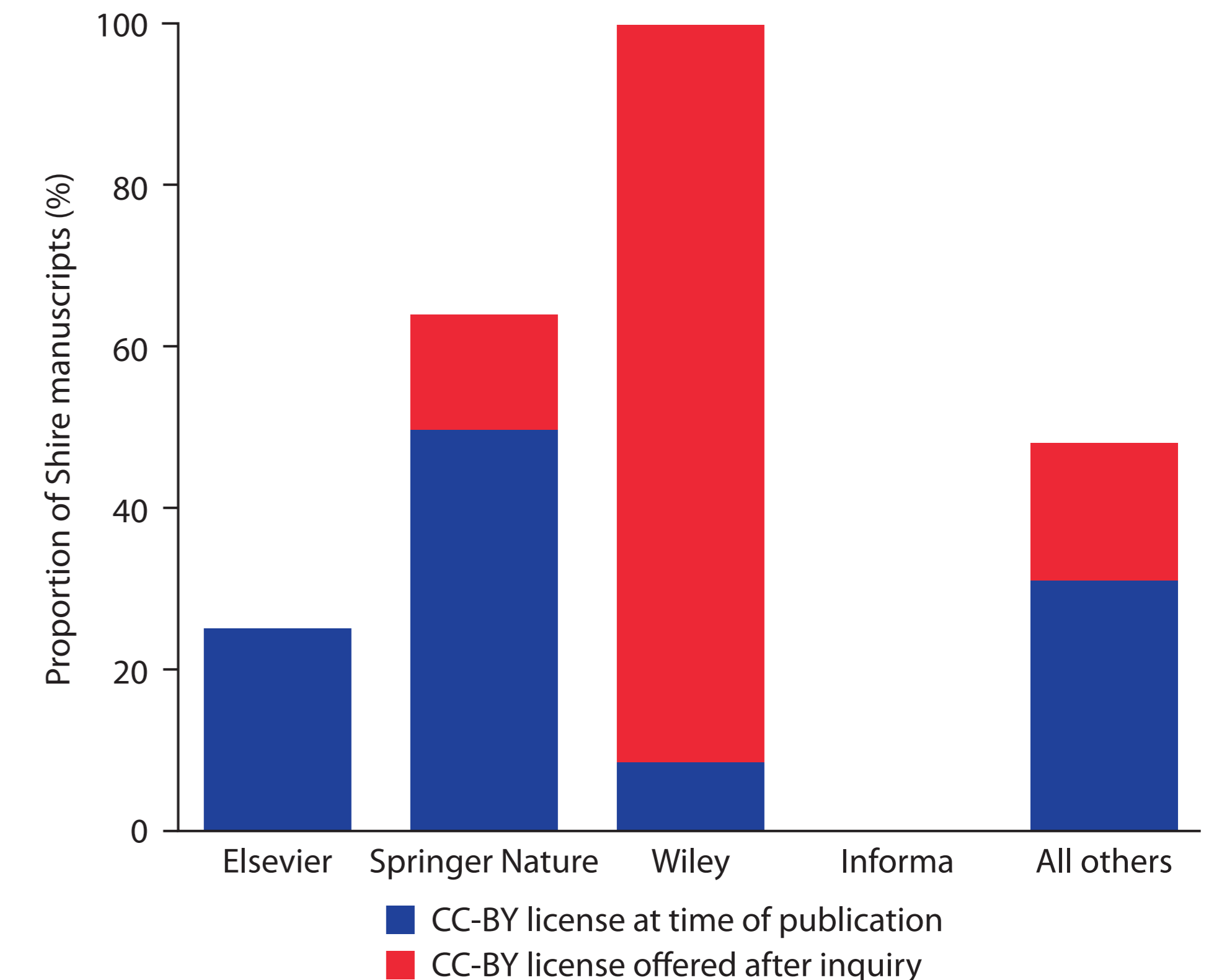


Table 1. Type of licenses for manuscripts published by the four largest medical publishers at the start of the study.

Publisher	CC-BY	CC-BY-NC	CC-BY-NC-ND	Free to read but journal retains copyright	Not free to read	Total
Elsevier	8 (25%)	0	21 (66%)	0	3 (9%)	32
Springer Nature	14 (50%)	6 (21%)	4 (14%)	4 (14%)	0	28
Wiley	2 (8%)	5 (19%)	16 (62%)	2 (8%)	1 (4%)	26
Informa	0 (0%)	5 (42%)	1 (8%)	6 (50%)	0	12
All others	15 (31%)	7 (15%)	8 (17%)	13 (27%)	5 (10%)	48

Table 2. Type of licenses offered after inquiry and time to decision for manuscripts published by the four largest medical publishers.

Publisher	CC-BY	CC-BY-NC	CC-BY-NC-ND	Free to read but journal retains copyright	Not free to read	Average time to final decision (days)
Elsevier	8 (25%)	0	21 (66%)	0	3 (9%)	147
Springer Nature	18 (64%)	6 (21%)	2 (7%)	2 (7%)	0	27
Wiley	26 (100%)	0	0	0	0	148
Informa	0 (0%)	5 (42%)	1 (8%)	6 (50%)	0	10
All others	23 (48%)	6 (13%)	9 (19%)	5 (10%)	5 (10%)	29

Table 3. Publishers that allowed license conversion, with associated costs.

Retrospective conversion to broader license	Publisher	Total cost per manuscript to obtain CC-BY, CC-BY-NC or CC-BY-NC-ND licence, range (US\$)
With additional fees supplemental to article processing charge	Bioexcel Publishing, Karger, Oceanside	12,700–24,000
Standard journal article processing charge	American Association of Clinical Endocrinologists, Elsevier, Mary-Ann Liebert, SAGE, Springer Nature, Thieme, Wiley	0–12,900

- Various responses from the publishers were received (**Table 3**).
 - Three publishers allowed retrospective OA conversion for an additional fee supplemental to their standard article processing charge (APC).
 - Seven publishers allowed retrospective OA conversion with no additional fee supplemental to their standard APC.
 - Three of these publishers placed limits on which articles would qualify, based on specific journal policies, timing of publication or research funding organization.
 - Four publishers did not allow retrospective OA conversion. Another four publishers did not provide CC licenses; these publishers retained copyright but the manuscripts were freely available on their websites.
- In total, ten publishers permitted 35 of the published articles to be converted retrospectively to a CC-BY license, and 6 articles to be converted from subscription-based non-OA to either a CC-BY-NC-ND or a CC-BY-NC license (**Table 3**).
- Of the three larger publishers, only Wiley offered to convert all manuscripts to OA with a CC-BY license (**Table 2** and **Figure 2**).

Discussion and conclusions

- Before implementation of a mandatory OA policy, approximately three-quarters of Shire-sponsored scientific manuscripts were published with OA.¹⁰
- For this study, we identified manuscripts published under a variety of copyright licenses and with the goal of increasing the number of manuscripts published with OA, in particular using the generic CC-BY 4.0 license or equivalent license.
- Our efforts to provide a broader availability of Shire-sponsored research yielded mixed results; we observed a range of responsiveness from publishers, with the average time to a final decision being 40 days and smaller publishers generally being the most responsive.
- When retrospective CC-BY was granted, the associated cost ranged widely, with some proving too costly for us to proceed with OA conversion for a few manuscripts.
- Of the four largest publishers contacted, only Wiley provided retrospective OA with CC-BY for all manuscripts resulting from Shire-sponsored medical research.

References

- Suber P. Available from: <http://legacy.earlham.edu/~peters/fos/overview.htm> (Accessed 7 January 2020).
- Budapest Open Access Initiative. Available from: www.budapestopenaccessinitiative.org (Accessed 7 January 2020).
- Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities. Available from: <https://openaccess.mpg.de/Berlin-Declaration> (Accessed 7 January 2020).
- Bethesda Statement on Open Access Publishing. Available from: <http://legacy.earlham.edu/~peters/fos/bethesda.htm> (Accessed 7 January 2020).
- Creative Commons. Available from: <https://creativecommons.org> (Accessed 7 January 2020).
- Wellcome Trust. Available from: <https://wellcome.ac.uk/funding/managing-grant/open-access-policy> (Accessed 7 January 2020).
- The Royal Society. Available from: <https://royalsociety.org/journals/authors/open-access/> (Accessed 7 January 2020).
- Bill and Melinda Gates Foundation. Available from: <https://www.gatesfoundation.org/How-We-Work/General-Information/Open-Access-Policy> (Accessed 7 January 2020).
- European Research Council. Available from: <http://ec.europa.eu/research/openscience/index.cfm?pg=openaccess> (Accessed 7 January 2020).
- Baronikova S, Desai SY, Rains CP. *Curr Med Res Opin* 2018;34:Suppl. 1, 1–4, DOI: 10.1080/03007995.2018.1440964.

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