



# Do journals restrict access to commercially funded research?

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## Background and objective

- Publishing research with open access increases the speed and transparency of research dissemination, enabling better and more efficient science and innovation in the public and private sectors.<sup>1</sup>
- Open access options differ across journals.
- Some governmental and charitable research funders have agreements with certain publishers that allow grantees to publish research open access with a Creative Commons Attribution (CC BY) license.<sup>2-6</sup>
- A CC BY license allows sharing and adaptation of published materials for commercial as well as non-commercial use (see **Definitions of CC licenses**). It is recommended by the Open Access Scholarly Publishers Association as the least restrictive Creative Commons (CC) license available.<sup>7</sup>
- We set out to clarify the open access options available in high impact journals and assess their level of restrictiveness and whether options are limited by the research funding source.

## Research design and methods

- Journals with an impact factor of at least 15 (on May 24, 2017) were identified using Journal Selector (Sylogent, Newtown, PA, USA).
  - Journals that only publish review articles were excluded.
- Information about these journals' open access policies was collected from journal websites and by email contact between June 29, 2017 and July 26, 2017 (up to three attempts).
  - The least restrictive open access offered by each journal was assessed and categorized using our own classification, according to:
    - whether a CC BY license was offered
    - whether there was an embargo prior to access
    - the version of the article that was available (published, accepted, submitted) (**Table 1**).
  - For journals that offered a CC BY license, the following were assessed:
    - the article processing charge for the license
    - the funding requirements for obtaining a CC BY license.
  - Information about other licenses and access offered was tabulated.
- Emails were sent to the journals between December 6, 2017 and January 2, 2018 requesting confirmation of our findings.

## Definitions of CC licenses<sup>8</sup>

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**Table 2. Open access policies of high impact factor journals that offer open access with the CC BY license (n = 23).**

Publisher	Journals included (n = 23)	Open access options	Funding requirements for obtaining open access with a CC BY license
American Association for the Advancement of Science (AAAS)	<i>Science</i> ; <i>Sci Transl Med</i>	<b>Immediate:</b> CC BY; no CC license (AV); <b>6 months after publication:</b> no CC license (AV); <b>12 months after publication:</b> no CC license (PV)	AAAS will allow authors funded by the Gates Foundation to publish their research under a CC BY license
American Chemical Society	<i>Acc Chem Res</i>	<b>Immediate:</b> CC BY; CC BY-NC-ND; no CC license (PV); <b>12 months after publication:</b> no CC license (PV)	<b>Authors who wish, or are required by funders, to have a CC BY license may purchase one for a fee</b>
American Society of Clinical Oncology	<i>J Clin Oncol</i>	<b>Immediate:</b> CC BY; CC BY-NC-ND; <b>6 months after publication:</b> no CC license (PV); <b>12 months after publication:</b> no CC license (PV)	CC licenses available only if funders are academic institutions, not-for-profit organizations, philanthropic foundations or government agencies
BMJ Group	<i>BMJ</i>	<b>Immediate:</b> CC BY; CC BY-NC	CC BY license available for authors whose funder requires it (funders who mandate CC BY include the Wellcome Trust, RCUK and the MRC)
Cell Press	<i>Cancer Cell</i> ; <i>Cell</i> ; <i>Cell Metab</i> ; <i>Cell Stem Cell</i> ; <i>Immunity</i>	<b>Immediate:</b> CC BY; CC BY-NC-ND; <b>12 months after publication:</b> no CC license (AV)	CC licenses available only to authors covered by a funding body agreement (there is a long list of non-commercial funding bodies on the journal websites) and whose funder mandates their use
Elsevier	<i>Lancet</i> ; <i>Lancet Diabetes Endocrinol</i> ; <i>Lancet Infect Dis</i> ; <i>Lancet Oncol</i> ; <i>Lancet Neurol</i> ; <i>Lancet Respir Med</i> ; <i>Gastroenterology</i> ; <i>J Am Coll Cardiol</i> ; <i>Eur Urol</i>	<b>Immediate:</b> CC BY; CC BY-NC-ND; <b>6 months after publication:</b> no CC license (PV)	CC licenses are available to authors funded by specific funding bodies (there is a long list of these non-commercial funding bodies on the journal websites)
European Society of Cardiology	<i>Eur Heart J</i>	<b>Immediate:</b> CC BY; CC BY-NC-ND; CC BY-NC-ND; no CC license (AV/SV); <b>12 months after publication:</b> no CC license (AV)	Elsevier has established agreements and developed policies to allow authors who publish in Elsevier journals to comply with manuscript archiving requirements of various funding bodies (there is a long list of non-commercial funding bodies on the journal websites)
Lippincott Williams & Wilkins	<i>Circulation</i>	<b>Immediate:</b> CC BY; CC BY-NC; CC BY-NC-ND; <b>6-12 months after publication:</b> no CC license (AV)	Authors funded by RCUK or the Wellcome Trust can use the CC BY license for their articles
Wiley-Blackwell	<i>Adv Mater</i>	<b>Immediate:</b> CC BY; CC BY-NC; CC BY-NC-ND; no CC license (SV); <b>12-24 months after publication:</b> no CC license (AV)	Note that authors funded by RCUK or the Wellcome Trust may choose the CC BY license if they agree to pay the article publication charge and commercial reuse of the article is not a factor
	<i>CA Cancer J Clin</i>	<b>Immediate:</b> CC BY; CC BY-NC; CC BY-NC-ND; no CC license (SV/PV); <b>12 months after publication:</b> no CC license (AV)	Authors whose funders have licensing mandates will be automatically directed to a CC BY license (the select funders that have unique agreements with Wiley are outlined on the journal's Funder Agreements page)

AV, accepted version; CC, Creative Commons; CC BY, Creative Commons Attribution; MRC, Medical Research Council; NC, Non-Commercial; ND, No Derivatives; PV, published version; RCUK, Research Councils UK; SV, submitted version.

## Funding

This project was funded by Oxford PharmaGenesis, Oxford, UK.

## Acknowledgments

Matthew Blowers (<https://orcid.org/0000-0001-7215-1332>), Katie Wilkinson (<https://orcid.org/0000-0002-9885-6442>) and Amy Williams (<https://orcid.org/0000-0002-9354-6402>) are employees of Oxford PharmaGenesis, Oxford, UK, who contributed to the development of this poster. M.B. contributed significantly to the visualization. K.W. edited, and A.W. reviewed this poster. Chris Winchester (<https://orcid.org/0000-0003-3267-3990>) is a director of the company and a shareholder of Oxford PharmaGenesis Holdings Ltd, and reviewed this poster.

## Disclosures

Tim Ellison, Laura Schmidt and Tim Koder are employees of Oxford PharmaGenesis, Oxford, UK.

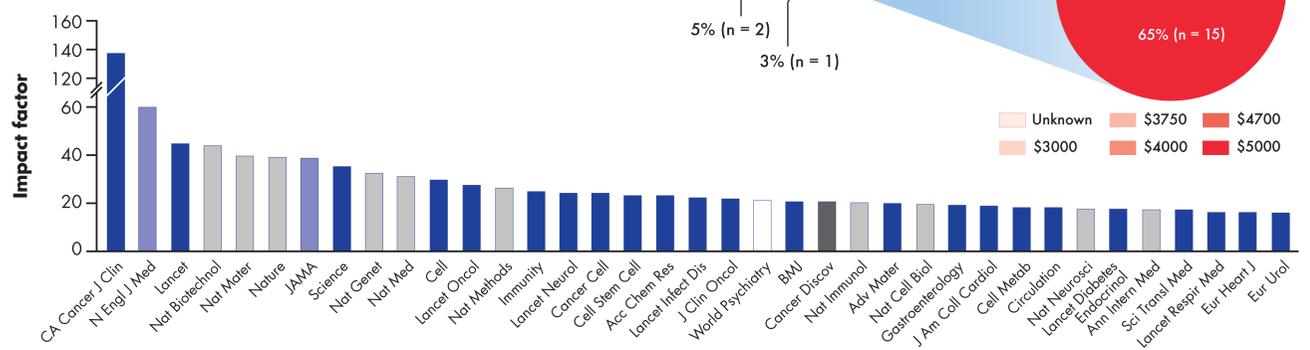
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Poster presented at the 14th Annual Meeting of the International Society for Medical Publication Professionals, April 30 until May 2, 2018, National Harbor, MD, USA

**Table 1. Categories for the least restrictive open access variant offered by each journal and key to colors used in Figures 1 and 2a.**

Category	Version of article available	Embargo	CC BY license offered by the journal?
1	Published	None	Yes
2	Published	None	No
3	Published	6 months	No
4	Accepted	6 months	No
5	Accepted	12 months	No

**Figure 1. Journals ranked by impact factor and categorized by their least restrictive open access variant available (n = 37).**



## Results

### Journals included in the analysis

- Thirty-seven journals, from 14 publishers, had an impact factor of at least 15 (**Figure 1**).

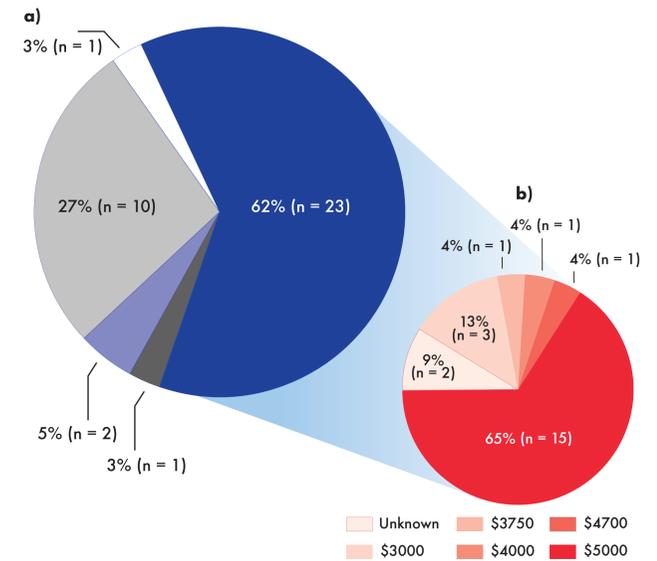
### Journals that offer open access with a CC BY license

- Open access with a CC BY license was offered by:
  - 3 (30%) of the 10 journals with the highest impact factor
  - 23 (62%) of the 37 journals analyzed (**Figure 2a**).
- The more restrictive CC BY-NC and/or CC BY-NC-ND licenses (see **Definitions of CC licenses**) were only made available by the journals that also offered a CC BY license, and access with these licenses was not subject to an embargo.

### The cost of open access with a CC BY license

- Of the 23 journals that offered a CC BY license, 21 (91%) disclosed article processing charges on their websites.
- Article processing charges for these journals ranged from \$3000 to \$5000; the most common fee was \$5000 (65% of journals) (**Figure 2b**).

**Figure 2. a) Journals categorized by their least restrictive open access variant available (n = 37) and b) article processing charges of journals that offer a CC BY license (n = 23).**



## Journals offering a CC BY license restrict its availability depending on the authors' funder

- The open access policies of high impact journals that offer open access with a CC BY license are included in **Table 2**.
- Of the 23 journals that offer immediate open access with a CC BY license, only one journal, *Acc Chem Res*, had an open access policy that allowed this option for commercial funders/pharmaceutical companies.

## Conclusions

- The availability of open access with a CC BY license for publications in journals with a high impact factor largely depends on authors having a specific non-commercial funding source.
- On these terms, pharmaceutical companies are not able to publish open access with a CC BY license in many journals.
- To give the scientific community full access to read, reuse and adapt medical publications, publishers and academic journal editors would ideally allow pharmaceutical companies to fund unrestricted and immediate open access to publications with a CC BY license.

## Author contributions

Conceptualization, project administration, T.E. (<https://orcid.org/0000-0003-0307-725X>), T.K. (<https://orcid.org/0000-0001-6152-7365>) and L.S. (<https://orcid.org/0000-0001-6117-781X>); methodology, resources, investigation, T.E.; writing – original draft, T.E.; visualization, T.E., L.S.; writing – review and editing, T.E., T.K. and L.S.; supervision, T.K., L.S.

## References

1. European Commission. Horizon 2020 – The EU Framework Programme for Research and Innovation. Open science (open access). Available from: <http://ec.europa.eu/programmes/horizon2020/en/h2020-section/open-science-open-access> (Accessed November 24, 2017).
2. Bill & Melinda Gates Foundation. Bill & Melinda Gates Foundation open access policy. Available from: <https://www.gatesfoundation.org/How-We-Work/General-Information/Open-Access-Policy> (Accessed November 24, 2017).
3. Wellcome Trust. Open access policy. Available from: <https://wellcome.ac.uk/funding/managing-grant/open-access-policy> (Accessed November 24, 2017).
4. Research Councils UK. RCUK policy on open access and supporting guidance. Available from: <http://www.rcuk.ac.uk/documents/documents/rcukopenaccesspolicy.pdf/> (Accessed November 24, 2017).

5. Medical Research Council. Open access policy. Available from: <https://www.mrc.ac.uk/research/policies-and-guidance-for-researchers/open-access-policy/> (Accessed November 24, 2017).
6. Marchington J et al. Open access licences: what drives publisher options? *Curr Med Res Opin* 2017;33(Suppl 1):26. Available from: [http://www.caudex.com/downloads/OA\\_survey\\_EU\\_ISMPP\\_2017\\_poster\\_15.pdf](http://www.caudex.com/downloads/OA_survey_EU_ISMPP_2017_poster_15.pdf) (Accessed November 24, 2017).
7. Open Access Scholarly Publishers Association. Best practices in licensing and attribution: What you need to know. Available from: <https://oaspa.org/best-practices-licensing-attribution-need-to-know/> (Accessed November 24, 2017).
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