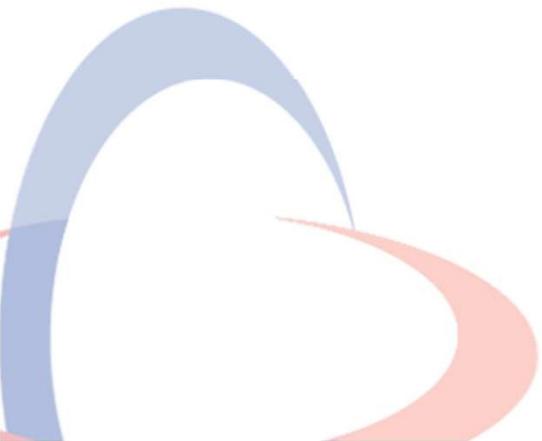


Open Pharma

Open access



What is open access?

'Open access' refers to peer-reviewed, full-text research articles that have been accepted for publication and are available:



on demand online



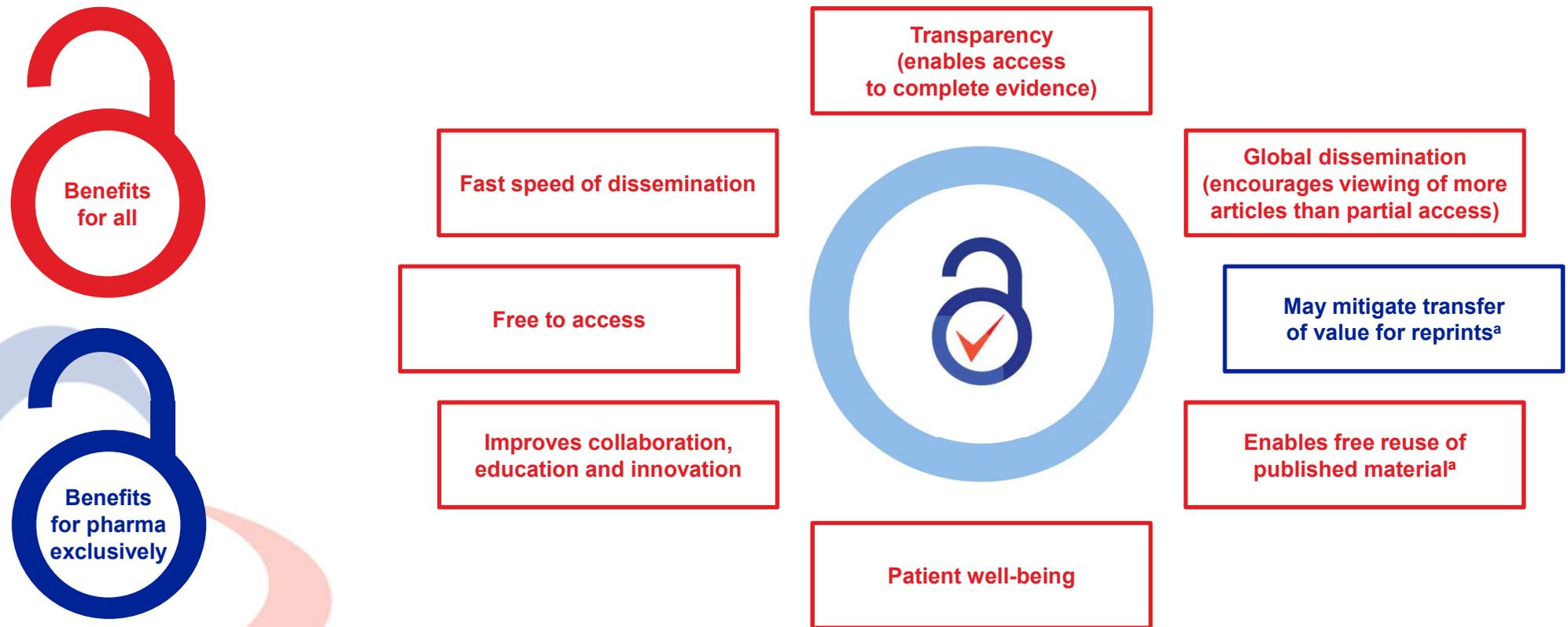
to read **without charge** to end users



There are varying **restrictions on reuse** of article content as specified by the copyright licence used, and the debate as to how open access should be best defined is ongoing

What is the objective and benefits of open access publishing?

To make all scientific research content available to anyone, anywhere in the world, to **read, share, reuse and build upon**



^aDepending on the open access licence used

Journal publishing models



Subscription

Reader pays
for subscription
or per article

Authors transfer copyright
to journal (CTA)



Hybrid

Reader pays
OR
Author/sponsor pays APC
for OA

Authors transfer copyright
to journal (CTA)
OR
Author retains copyright
if OA option is selected



Open access

Author/sponsor pays APC
for OA

Author retains copyright

What open access options exist for authors?

Gold OA

Where? Available on the publisher's website (only full open access or hybrid journals)

Which article version? Published version of record

When? Available immediately upon publication

Cost? APC (usually \$3000–5000)

Licence? Creative Commons licence (e.g. CC BY, CC BY-NC, CC BY-NC-ND)

Green OA

Where? Available on an online repository other than the publisher's website (e.g. PubMed Central)

Which article version? Accepted or version of record

When? Available after embargo period (i.e. 0, 6 or 12 months)

Cost? Free

Licence? Standard CTA or ELA

Bronze OA

Bronze OA was coined in a study by Piwowar *et al.*¹ in 2018 to mean free to read on the publisher's webpage but without a licence permitting free reuse of content

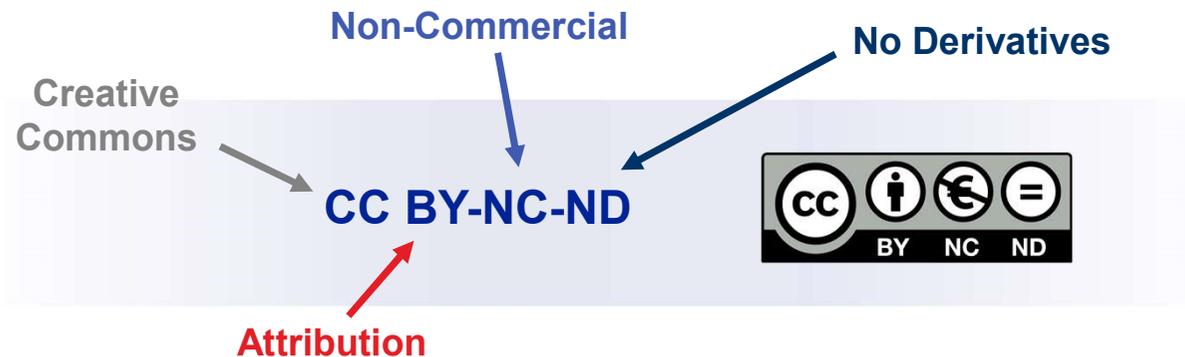
APC, article processing charge; BY, Attribution; CTA, copyright transfer agreement; ELA, exclusive licence agreement; NC, NonCommercial; ND, NoDerivs; OA, open access

1. Piwowar H *et al.* *PeerJ* 6:e4375; doi: 10.7717/peerj.4375

Creative Commons licence deconstructed¹

- With Gold OA, the author pays an APC to retain copyright of their article under the terms of a particular Creative Commons licence
- Some Creative Commons licences allow more sharing and reuse than others

Example



Free to download the original work and share it as long as the authors are **credited**, but the work **may not be adapted or used commercially**

APC, article processing charge; BY, Attribution; CC, Creative Commons; NC, NonCommercial; ND, NoDerivs; OA, open access

1. <https://creativecommons.org/licenses/>

Creative Commons licences¹

CC BY-NC-ND



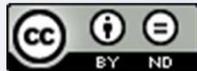
Free to download the original work and share it as long as the authors are **credited**, but the work **may not be adapted or used commercially**

CC BY-NC



Free to **adapt** the original work **non-commercially** and, although derivative work must also acknowledge the authors and be non-commercial, they don't have to be licensed on the same terms

CC BY-ND



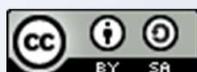
Free to **redistribute** the original work, commercially or non-commercially, provided it is passed along **unchanged** and in whole, and the authors are **credited**

CC BY



Free to **distribute** and **adapt** the original work, **even commercially**, as long as the original creation and authors are **credited**

CC BY-SA



Free to **distribute** and **adapt** the original work, **even commercially**, as long as the original creation and authors are **credited** and the new work is **licensed under identical terms**

BY, Attribution; CC, Creative Commons; NC, NonCommercial; ND, NoDerivs; SA, ShareAlike

1. <https://creativecommons.org/licenses/>

Open access guidance in the literature

BOAI

The **Budapest Open Access Initiative**¹ recommends:

- that all research funders, public or private, should have a policy assuring that its funded research is made open access as soon as possible
- a CC BY licence as the optimal open access licence

OASPA

The **Open Access Scholarly Publishers Association**² strongly encourages the use of the CC BY licence rather than one of the more restrictive licences

Berlin Declaration
Bethesda Statement

The **Berlin Declaration**³ and the **Bethesda Statement**⁴ also recommend open access that allows end users to reuse material without restrictions

World Health
Organization

The **WHO Statement on Public Disclosure of Clinical Trial Results**⁵ states that the main findings of clinical trials are to be published through an open access mechanism, unless there is a specific reason why open access cannot be used or otherwise made available publicly within 24 months of study completion

BY, Attribution; CC, Creative Commons; WHO, World Health Organization

1. <http://www.budapestopenaccessinitiative.org/boai-10-recommendations>; 2. <https://oaspa.org/best-practices-licensing-attribution-need-to-know/>;
3. <https://openaccess.mpg.de/Berlin-Declaration>; 4. <http://legacy.earlham.edu/~peters/fos/bethesda.htm>; 5. <https://www.who.int/ictrp/results/reporting/en/>

Open Pharma's open access aspiration

Ideally, all published medical research, regardless of its funding source, should be available online immediately upon publication without charge to the user so that the content can be **read and **reused** by the medical and scientific community as well as patients^a**

^aThis aspiration is in line with the terms of the CC BY and CC BY-NC licences

Are open access options always available?

- Pharma does not always have the same options as specific funders who have mandated gold OA¹
 - Some journals also indicate on their websites that the availability of green OA is limited to research funded by non-commercial organizations

Licence		Free to read?	Licence available to pharma?
CC BY			Not frequently available in journals with a high impact factor ^{a1}
CC BY-ND			Unknown, less frequently observed in literature
CC BY-NC			Yes, frequently
CC BY-NC-ND			Yes, frequently

^aIn an analysis by Ellison *et al.* of 21 journals with a high impact factor that offered the CC BY licence, only one potentially allowed this option to pharma
 BY, Attribution; CC, Creative Commons; NC, NonCommercial; ND, NonDerivs; OA, open access

1. Ellison T *et al.* BioRxiv [preprint]; 2018 bioRxiv 250613. Available from: <https://www.biorxiv.org/content/early/2018/01/22/250613>

How can some of the barriers to publishing open access be overcome?

Barriers

- The option to publish research OA is **not always available to commercial research funders** (e.g. OA under a CC BY licence is not always available for industry-sponsored publications)
- Many journals only allow articles to be made OA following an **embargo period of up to 12 months after publication**
- **Cost** of OA fees
- Requiring OA may **restrict authors' choice** of journal

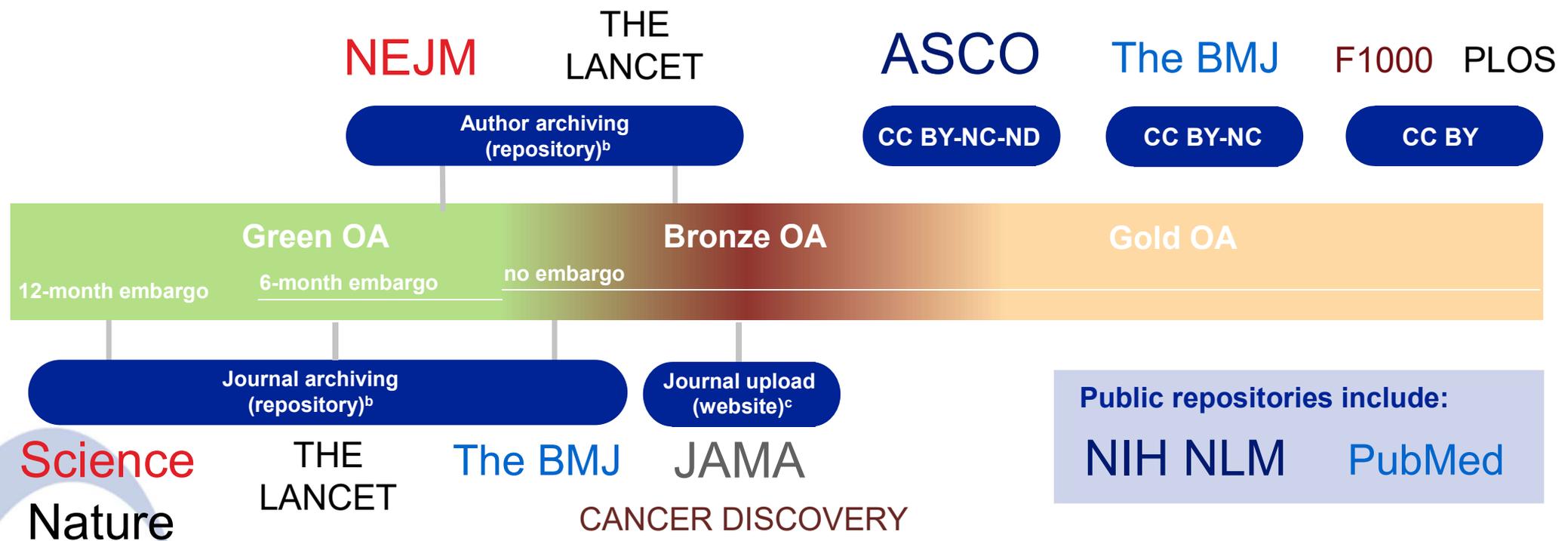
Steps to take

- Choose a journal that **allows commercially funded research** to be published OA
- **Select the least restrictive OA licence** available
- Choose a journal that makes articles OA **immediately** or with a **minimal embargo** period
- **Calculate current OA costs** and **decide** whether the current OA **budget should be increased to pay for OA with a Creative Commons licence** based on the potential increase in reach and impact of articles

Outcomes

- Guaranteed **free-to-read publications**
- Some published content can be **reused** without restrictions
- Publications available with a **minimal embargo period**
- **Increased budget allocation** for OA
- **Increased access** to research for the **scientific and medical community** as well as **patients**

Examples of typical OA options offered by journals^a



^aJournals can offer more than one type of option. The OA options listed here should be available for industry-funded research manuscripts

^bJournals specify whether articles can be archived by authors or the journal in either public repositories or on institutional websites and either with or without an embargo

^cFree to read on the publisher's webpage but without a licence permitting free reuse of content (e.g. JAMA Network Reader)

BY, Attribution; CC, Creative Commons; NC, NonCommercial; ND, NoDerivs; OA, open access

Funders moving towards open access

Governmental and charitable research funders are increasingly requiring or encouraging open access publishing under a CC BY licence; several funders require open access publishing with a maximum embargo period of 6 months

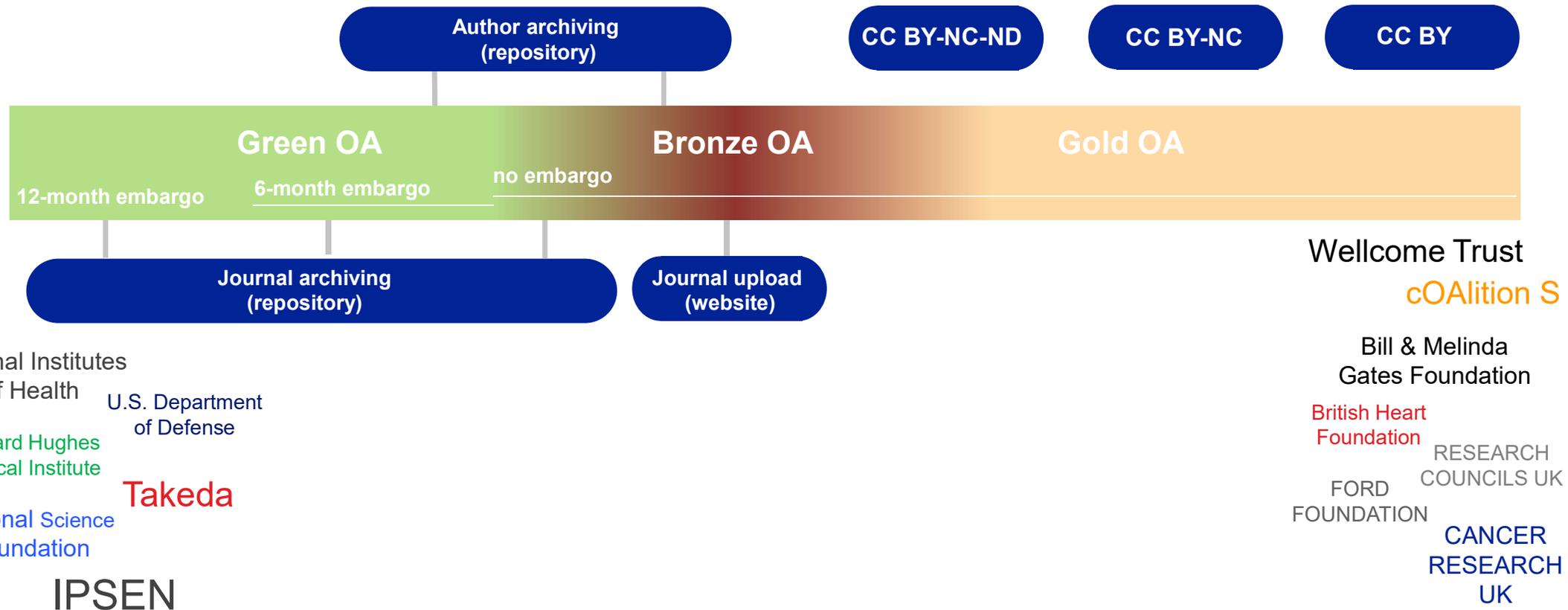
Other research funders are requiring authors to make research papers publicly accessible by no later than 12 months after publication^a (CC BY licence not required)

Bill & Melinda Gates Foundation
 Wellcome Trust
 Bloodwise
 PARKINSON'S
 ARTHRITIS RESEARCH UK
 British Heart Foundation
 Breast Cancer Now
 cOAlition S
 European Commission Horizon 2020
 RESEARCH COUNCILS UK
 CANCER RESEARCH UK

National Institutes of Health
 Howard Hughes Medical Institute
 National Science Foundation
 Takeda
 U.S. Department of Defense
 IPSEN

^aSee <https://libraries.mit.edu/scholarly/research-funders/> for a list of major US research funder open access requirements
 BY, Attribution; CC, Creative Commons

Open access requirements differ by research funder



BY, Attribution; CC, Creative Commons; NC, NonCommercial; ND, NoDerivs; OA, open access

““ *After 1 January 2020, scientific publications on the results from research funded by public grants provided by national and European research councils and funding bodies must be published in **compliant** Open Access Journals or on compliant Open Access Platforms.* ””

<https://www.coalition-s.org/>

Criteria for ‘compliant’ open access journals and platforms include the following

Scholarly content must be openly available immediately upon publication without any embargo period

The journal platform must enable authors to publish under a CC BY 4.0 licence

The ‘hybrid’ model of publishing is not compliant

BY, Attribution; CC, Creative Commons

1. <https://www.coalition-s.org/>

What are pharma companies doing?

Takeda

Company policy¹ (effective from January 2018)

Shire Plc (now part of Takeda) implemented a policy requiring the submission of all Shire-supported research to journals that offer public availability via open access

IPSEN

Company policy² (effective from January 2019)

Ipsen implemented a policy requiring all Ipsen-affiliated research to be published open access, meaning articles will be openly accessible online and free of cost

GSK

Company position

GSK and other pharma companies strongly recommend that its funded research is published open access

1. <https://www.shire.com/en/newsroom/2018/january/xajhds>

2. <https://www.ipsen.com/ipsen-commits-to-making-all-its-published-scientific-research-freely-accessible-to-everyone/>

When publishing open access, watch out for predatory publishers

Alongside the many legitimate online-only open access journals that have sprung up in recent years, fraudulent 'predatory' journals have also been on the rise



Are any of the following true of your target journal?

A stated impact factor that isn't listed in the official Thomson Reuters list

Not indexed in repositories such as PubMed or Google Scholar

An abnormally short peer-review with no explanation for the speed



Tacky and unprofessional website design

The journal name does not fit with its stated mission

A non-institutional contact email (for instance@gmail.com)

Poor spelling or grammar on the journal website or in correspondence

Open access guidance for pharma

Clarify your meaning of open access – whether the publication is only free to read and whether any reuse rights exist



Educate internal teams and authors on issues and opportunities with open access

Understand the different licences and restrictions and **consider** including open access costs in the budget for publications work



Develop a company open access policy or position

Resources

- Piwowar H *et al.* The state of OA: a large-scale analysis of the prevalence and impact of open access articles. *PeerJ* 2018;6:e4375; doi: 10.7717/peerj.4375
- Creative Commons. About the licences. Available at: <https://creativecommons.org/licenses/>
- Budapest Open Access Initiative: 10 recommendations. Available at: <http://www.budapestopenaccessinitiative.org/boai-10-recommendations>
- Open Access Scholarly Publishers Association: best practices in licensing and attribution. Available at: <https://oaspa.org/best-practices-licensing-attribution-need-to-know/>
- Berlin Declaration on Open Access. Available at: <https://openaccess.mpg.de/Berlin-Declaration>
- Bethesda Statement on Open Access Publishing. Available at: <http://legacy.earlham.edu/~peters/fos/bethesda.htm>
- WHO statement on public disclosure of clinical trial results. Available at: <https://www.who.int/ictrp/results/reporting/en>
- Ellison T *et al.* Open access policies of high impact medical journals: a cross-sectional study. *BioRxiv* [preprint]; 2018 bioRxiv 250613. Available from: <https://www.biorxiv.org/content/early/2018/01/22/250613>
- Scholarly Publishing – MIT Libraries. Research funder requirements. Available at: <https://libraries.mit.edu/scholarly/research-funders/>
- Newsroom. Shire. Available at: <https://www.shire.com/en/newsroom/2018/january/xajhds>
- Ipsen commits to making all its published scientific research freely accessible to everyone. Available at: <https://www.ipsen.com/ipsen-commits-to-making-all-its-published-scientific-research-freely-accessible-to-everyone>
- Bill & Melinda Gates Foundation open access policy. Available at: <https://www.gatesfoundation.org/How-We-Work/General-Information/Open-Access-Policy>
- Wellcome Trust open access policy. Available at: <https://wellcome.ac.uk/funding/managing-grant/open-access-policy>
- Plan S – Making full and immediate open access a reality. Available at: <https://www.coalition-s.org/>

Be an ambassador for open science!

Work with others in your organization



Share this resource with your colleagues



Think about how you could introduce open science activities in your role

Get involved with the conversation



Tweet us @_OpenPharma



Have something to say?
Write a piece for our blog

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