Science, trust, and preprints





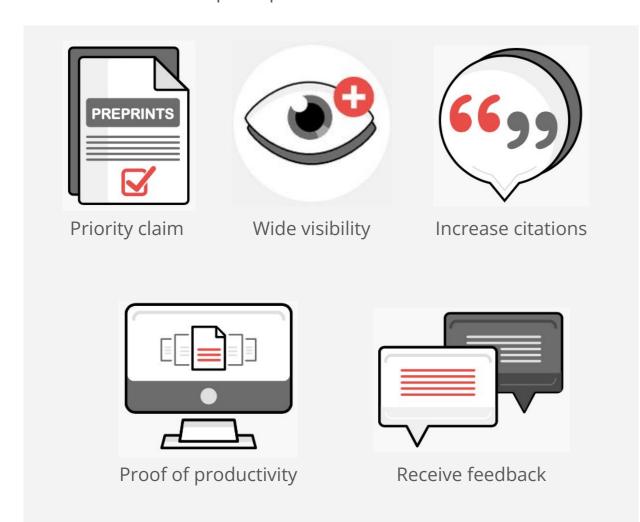
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Preprints adoption in the life sciences increases

Benefits of preprints

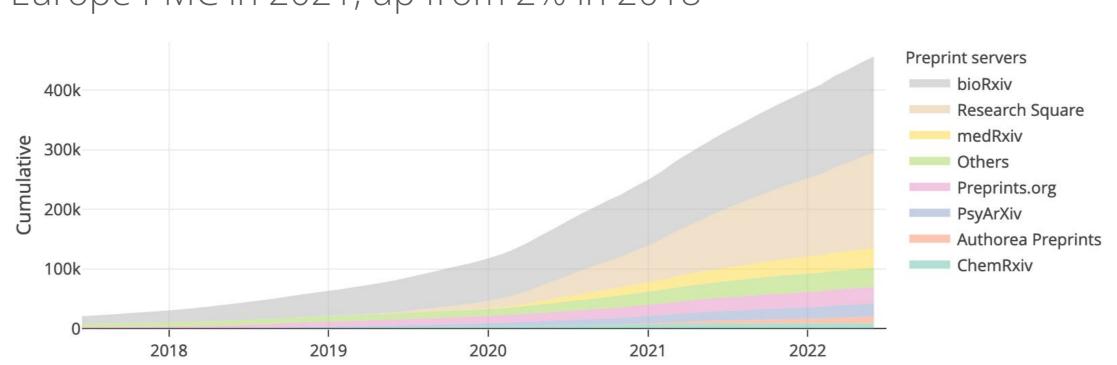
A **preprint** is a scientific manuscript uploaded by the authors to a public preprint server



Adapted from https://asapbio.org/preprint-info

Growth of preprints in the life sciences

The uptake of preprints in the life sciences has increased significantly, preprints comprised 9% of new literature loaded to Europe PMC in 2021, up from 2% in 2018



To support preprint adoption, open discovery services, such as Europe PMC, aggregate preprints from different platforms and make them searchable alongside peer reviewed journal articles

Europe PMC

- Global, open, free resource for life science articles and preprints
- Partner of PubMed Central USA
- Repository of choice for 37 international funders

475,000 preprints from 24 different platforms discoverable in Europe PMC



Designing open tools to help build trust in preprints

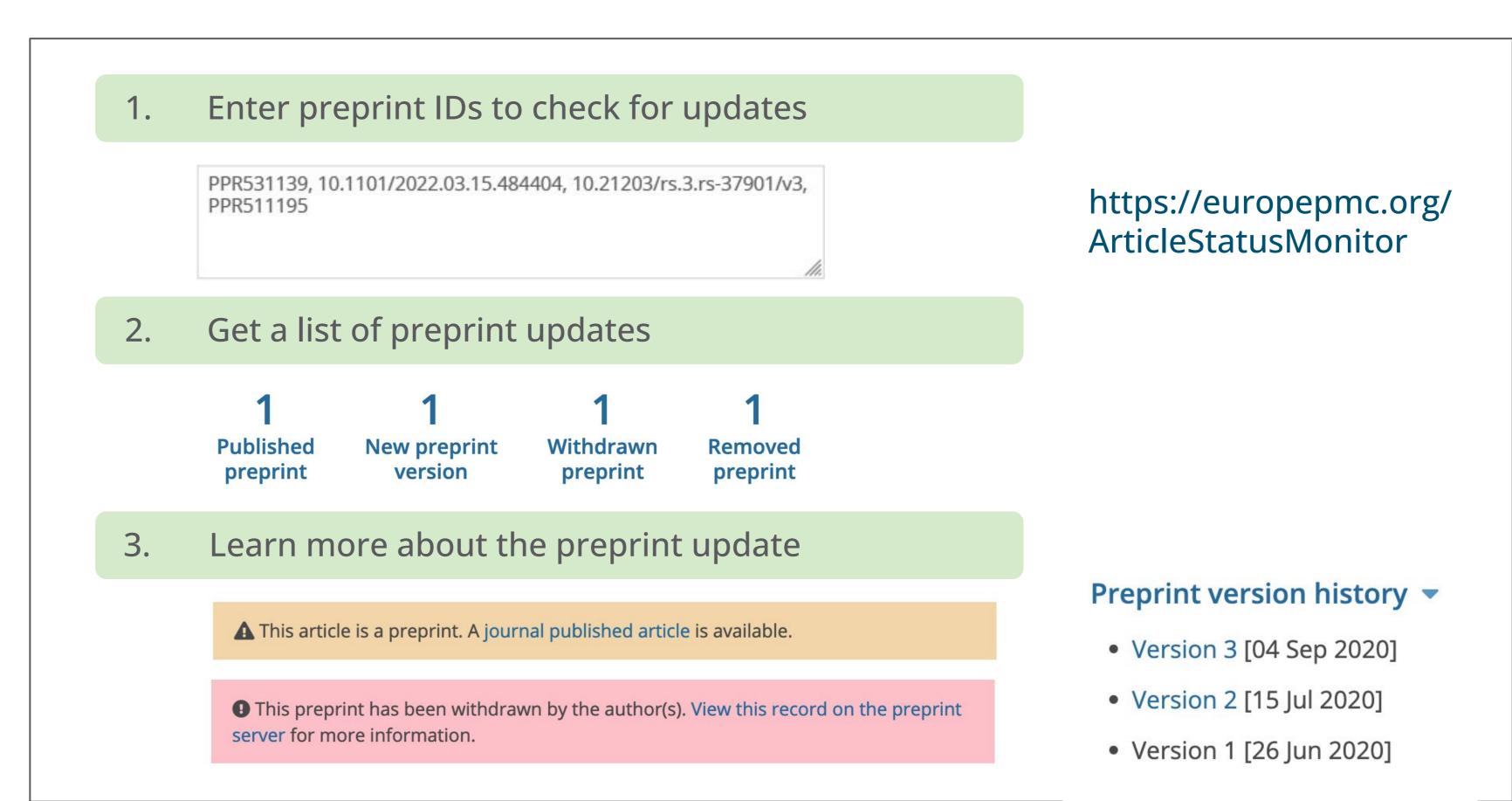
Changes to preprint records



How do I know which version to cite, what changes have been made, and whether conclusions still stand before I use the data in my own work?



Article status monitor tool



Challenges

Preprint versions

- Reusing same identifier (DOI) for new preprint versions very difficult to record version history
- Citing incorrect preprint version problematic if an older preprint version has been cited and the conclusion or data have changed

Preprints and journal articles

- Title and authors can change from preprint to publication hard to match and link the two
- Journal articles are rarely linked to preprints if an article has been retracted it will not be indicated on the corresponding preprint page

Withdrawals/removals/deletions

- Currently no way to indicate withdrawals/ removals via centralised service (Crossref) difficult to identify withdrawn/ removed preprints
- The reason for withdrawal/removal is rarely provided difficult to know whether original conclusions and data were at fault
- Cases of preprint deletion where the preprint has been cited, citations will lead to a 404 page

Opportunities

Preprint authors

- Familiarise yourself with preprint server policies before preprinting
- When citing a preprint, check for newer versions
- Provide a reason for preprint removal or withdrawal
- Where possible notify the preprint server about the published version

Preprint platforms and tools

- Closer integration of preprints with citation managers notifications of new versions, withdrawals/removals when citing the record
- Clear policies on preprint removal/withdrawal/deletion for authors

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