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ORCID uptake in pharma-sponsored research

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INTRODUCTION

- ORCID iDs are unique, persistent digital identifiers that provide author disambiguation and allow connections to be made between authors and their affiliations, publications and other scholarly contributions.
- Inclusion of ORCID iDs in journal publications fosters transparency and makes research more discoverable, both of which are essential for establishing and maintaining trust between the funders, authors and users of research.
- There are more than 13 million ORCID iDs in use[1] and over 1200 member organizations,[2] including academic institutions, funders and publishers.
- We analysed trends in ORCID iD registration by pharma employees and how ORCID iD use in pharma-sponsored publications had changed over time.

OBJECTIVE

- The aim of this study was to measure ORCID uptake by employees of the 14 pharma companies that are Members and Supporters of Open Pharma, and to assess how ORCID iD use in publications funded by six long-standing Open Pharma Member and Supporter pharma companies has changed over time.

RESEARCH DESIGN AND METHODS

- To determine ORCID uptake, ORCID iD registrations by employees of 14 pharma companies between 01/01/2018 and 30/06/2021 were extracted and pooled using ORCID's application programming interface and organization email domains (e.g. @gsk.com).
- Previously, ORCID iD use in publications of studies sponsored by six of these companies was assessed using PubMed to search for and extract metadata from their publications published between 01/01/2018 and 01/07/2019.[3]
- For comparison, this analysis was reperformed for the same six companies between 01/01/2020 and 01/07/2021 (**Figure 1**).

Figure 1: Study design for the analysis of ORCID use in publications.

Search

An advanced search in PubMed was designed with the following criteria

- **Field 1**: affiliation; [name of organization]
- **Field 2**: date – publication; 01/01/2020 to 01/07/2021
- **Field 3**: publication type; 'clinical study', 'clinical trial', 'clinical trial, phase i', 'clinical trial, phase ii', 'clinical trial, phase iii', 'clinical trial, phase iv', 'multicenter study', 'randomized controlled trial'

PubMed and ORCID data extraction

MEDLINE data including PubMed IDs, author names, affiliations, ORCID iDs, titles, publishers, journals, DOIs and publication dates were extracted from the search results

DOI, digital object identifier.

RESULTS

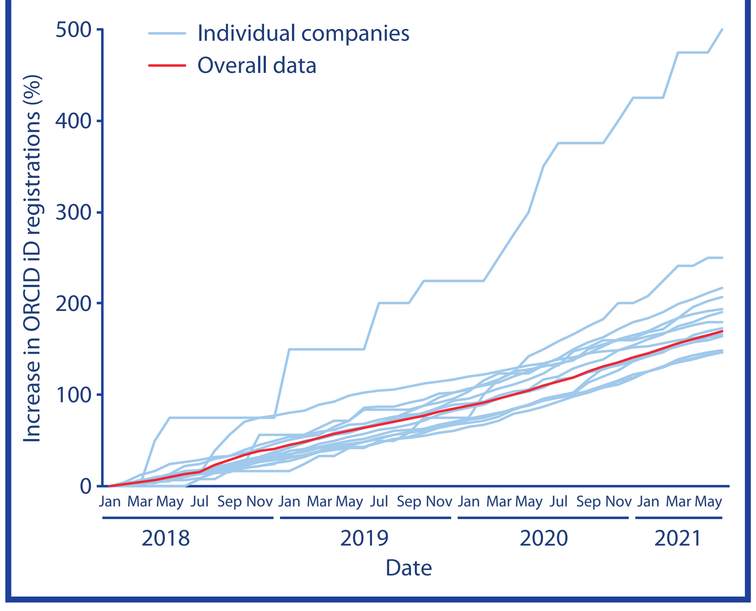
ORCID uptake among pharma employees

- Overall, ORCID iD registrations by employees at the 14 companies increased by 169% between 01/01/2018 and 30/06/2021, based on email domains (**Figure 2**).

ORCID use in pharma-sponsored publications

- PubMed data were extracted for 1289 papers sponsored by the six pharma companies published in 459 journals and listing 18 366 authors, compared with 843 papers, 346 journals and 10 091 authors in the previous study (in 2018–2019).[3]

Figure 2: Increase in ORCID iD registrations by employees at 14 pharma companies between January 2018 and June 2021.



Frequency of ORCID use in publications

53.4% increase
in papers including one or more ORCID iDs
Currently: 42.6% (549/1289)
Previously: 27.8% (234/843)

62.1% increase
in papers including multiple ORCID iDs
Currently: 52.6% (289/549)
Previously: 32.5% (76/234)

ORCID use by authors in publications

18 366 authors

23.3% (4275/18 366)
of authors were affiliated with one of the six pharma companies
Previously: 30.6% (3089/10 091)
24.0% decrease

76.7% (14 091/18 366)
of authors had an external affiliation
Previously: 69.4% (7002/10 091)
10.6% increase

9.0% (1647/18 366)
of authors included an ORCID iD
Previously: 3.8% (388/10 091)
133.2% increase

4.7% (200/4275)
of pharma-affiliated authors submitted an ORCID iD
Previously: 2.1% (65/3089)
122.3% increase

10.3% (1447/14 091)
of authors with an external affiliation submitted an ORCID iD
Previously: 4.6% (323/7002)
122.6% increase

Consistency of ORCID iDs listed

23.8% (79/332)
of authors of multiple papers use their ORCID iD consistently
Previously: 9.1% (11/121)
161.7% increase

STRENGTHS AND LIMITATIONS

- The ORCID uptake analysis assessed ORCID iD registrations by employees at a diverse range of large and small pharma companies from around the globe, overall providing a broad picture of ORCID registrations across the pharma industry.
- The ORCID use analysis assessed the use of ORCID iDs across an extensive data set representing the majority of clinical publications sponsored by six pharma companies, providing a comprehensive picture of ORCID use within each company.
- The total number of registered authors captured for individual companies is likely to be an underestimate because authors may register with a non-company email address and may not add their company email address to their ORCID record.
- Not all registered users would have necessarily published within the period used for the PubMed data extraction.
- ORCID use in publications may be underestimated if ORCID iDs were not captured correctly during the publication process or subsequently entered incorrectly into the PubMed metadata.
- The PubMed data extraction did not necessarily capture data for authors affiliated to subsidiaries of the six companies.

A TOOLKIT TO FACILITATE ADOPTION OF ORCID BY PHARMA

- In mid-2017, GSK piloted an ORCID adoption initiative, intended to increase registration for and use of ORCID iDs by its employees and external collaborators.[4]
  - Following the initiative, ORCID iD registrations by GSK employees increased by 242% over a period of 24 months, a twofold greater increase in registrations than the mean for six large pharma companies (including GSK) over the same period.[3]
- Based on this successful pilot, GSK extended the ORCID adoption initiative to external authors disclosing GSK-sponsored research.
- Open Pharma/GSK would like to propose a free toolkit to support the adoption and best practice use of ORCID by authors of pharma-sponsored publications through the systematic engagement and education of authors throughout publication development. Scan the QR code to access the toolkit!

CONCLUSIONS

- ORCID iD registration by pharma employees is increasing.
- ORCID iD use by authors of pharma-sponsored publications is also increasing, with a larger proportion of papers associated with one or more ORCID iD.
- However, ORCID iD use remains inconsistent, and most authors of pharma-sponsored publications do not include their ORCID iD in all of their publications.
- The 2022 update of the Good Publication Practice (GPP 2022) guidelines recommend the use of ORCID iDs to ensure transparency of author identities.[5]
- Sustained education and engagement efforts from pharma companies and publishers are needed to ensure authors of pharma-sponsored publications use their iDs consistently.
- The supportive toolkit shared here may help pharma companies engage their authors for further adoption of ORCID within the pharma industry.

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DISCLOSURES

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