

Registration and use of ORCID by pharma

Sarah Sabira^{a*}, Paul Farrow^a, Matt Buys^{bt}, Ana Cardoso^b, James Munday^a, Tom Rees^a and Alice Meadows^{bt}

^aResearch Evaluation Unit, Oxford PharmaGenesis Ltd, Oxford, UK; ^bORCID, Inc., Bethesda, MD, USA

[†]At the time of writing

*Correspondence: Sarah.Sabir@pharmagenesis.com

Scan here to download the poster and access additional data and data for the individual anonymized companies analysed



ABSTRACT

Objective
An ORCID identifier (ORCID ID) provides an author with unique, persistent digital identifier, providing author disambiguation and increasing transparency and discoverability. We analysed the uptake and use of ORCID IDs by six pharmaceutical companies.

Research design and methods
Registration data for pharma authors were extracted and pooled using ORCID's application programming interface (API) and company email domains (e.g. @gsk.com). To assess ORCID use at the publication level, a search for 'clinical trial' was conducted for each organization in PubMed (01/01/2018–01/07/2019); author information was retrieved using ORCID's API for the ORCID IDs found in the PubMed record metadata.

Results
Pharma ORCID registrations increased between 01/06/2017 and 30/06/2019, based on email domains; GlaxoSmithKline demonstrated a higher than average increase in registrations, following an internal pilot. PubMed data for 843 articles from 346* journals were extracted. Of the 10 091 authors, an ORCID ID was included 388 times (4%); 56% corresponded to first/last author. Only one ORCID ID was submitted for 68% of papers (158/234) that included ORCID IDs. Of the 343 unique IDs, 17% were affiliated to the six companies. Of the authors that included ORCID IDs and authored multiple papers, 91% (110/121) inconsistently provided an ID on all publications captured. Records listed employment details (28%), funding (5%) and published works (48%), and 67% were updated within the 3 months before analysis.

Conclusions
ORCID uptake by pharma is increasing. However, despite an increase in the registration and use of ORCID, the inclusion of ORCID IDs in published articles remains inconsistent. Education of authors, journals and editors on the benefits of ORCID may improve practices in scholarly publishing.
*During reanalysis of the data, this figure was adjusted to exclude duplicate journals across the six companies analysed. There have also been three minor adjustments to figures that did not affect the original percentages.

Keywords: Authorship, Best practice, Metrics, Tools

INTRODUCTION

- Transparency and discoverability are essential for establishing trust across a global community of pharma company and academic collaborators.
- Open Researcher and Contributor ID (ORCID) provides authors with a unique persistent digital identifier (an ORCID ID) that solves author disambiguation and allows trusted connections between researchers, their affiliations and their contributions.
- There are more than 7.5 million ORCID IDs in use by the research community and over 1000 member organizations, consisting of academic institutions, funders and publishers, that benefit from the assurance provided by ORCID.
- Until now, no pharma companies have integrated ORCID into their own systems; however, pharma company researchers use ORCID IDs during the article publication process, when they are requested or required to do so by the publisher.
- The level of ORCID uptake by pharma company researchers has not been previously assessed and reported.

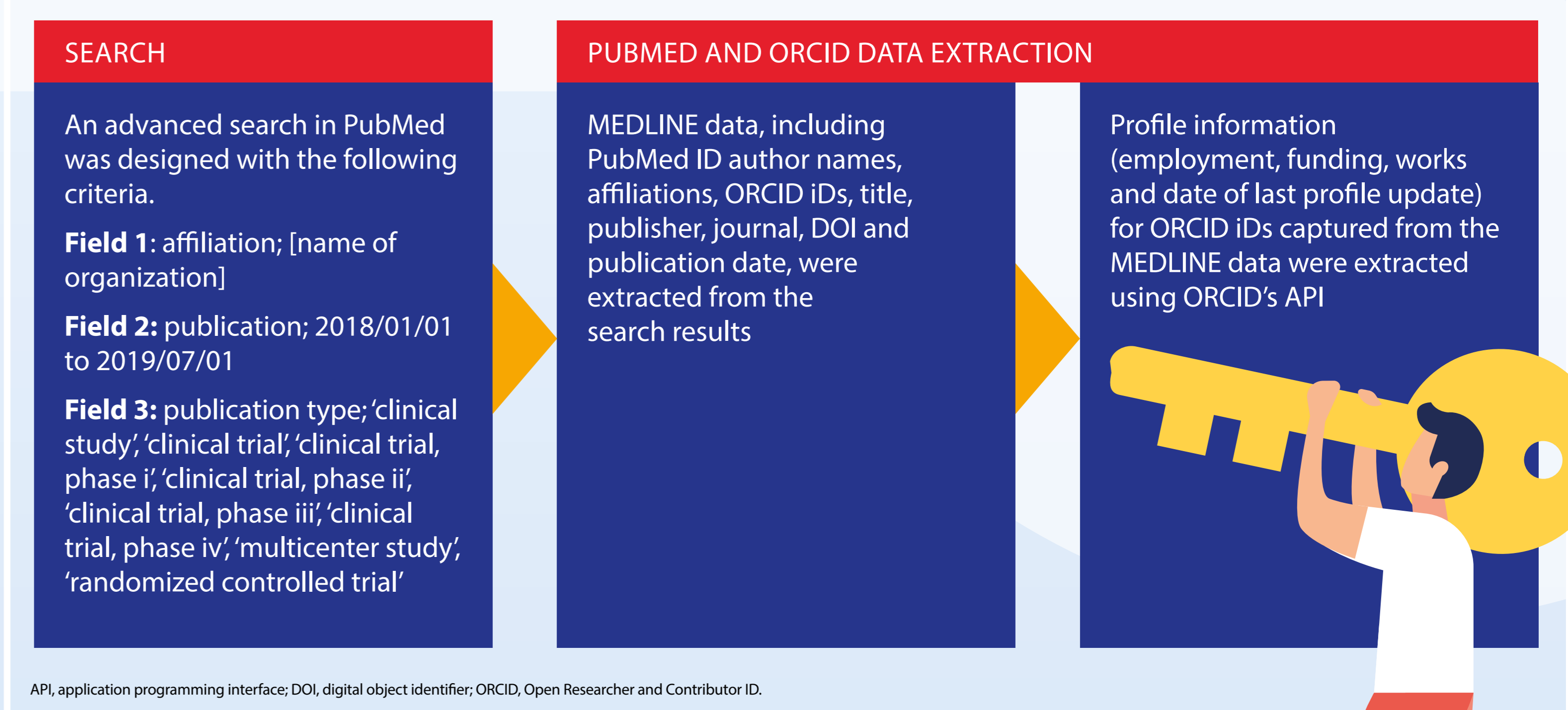
OBJECTIVE

- The aim of this study was to assess the current uptake and use of ORCID in publications funded by six of the leading pharma companies.

RESEARCH DESIGN AND METHODS

- To determine the uptake of ORCID, registration data from June 2017 to June 2019 were extracted and pooled using ORCID's free application programming interface (API) and the email domains from the companies of interest.
- To assess ORCID use in publications funded by the companies included in the analysis, metadata were extracted from PubMed for the period between January 2018 and July 2019 (Figure 1).
- ORCID profile information for internal employees and external collaborators who had an ORCID ID recorded in the PubMed metadata was extracted using ORCID's API.

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

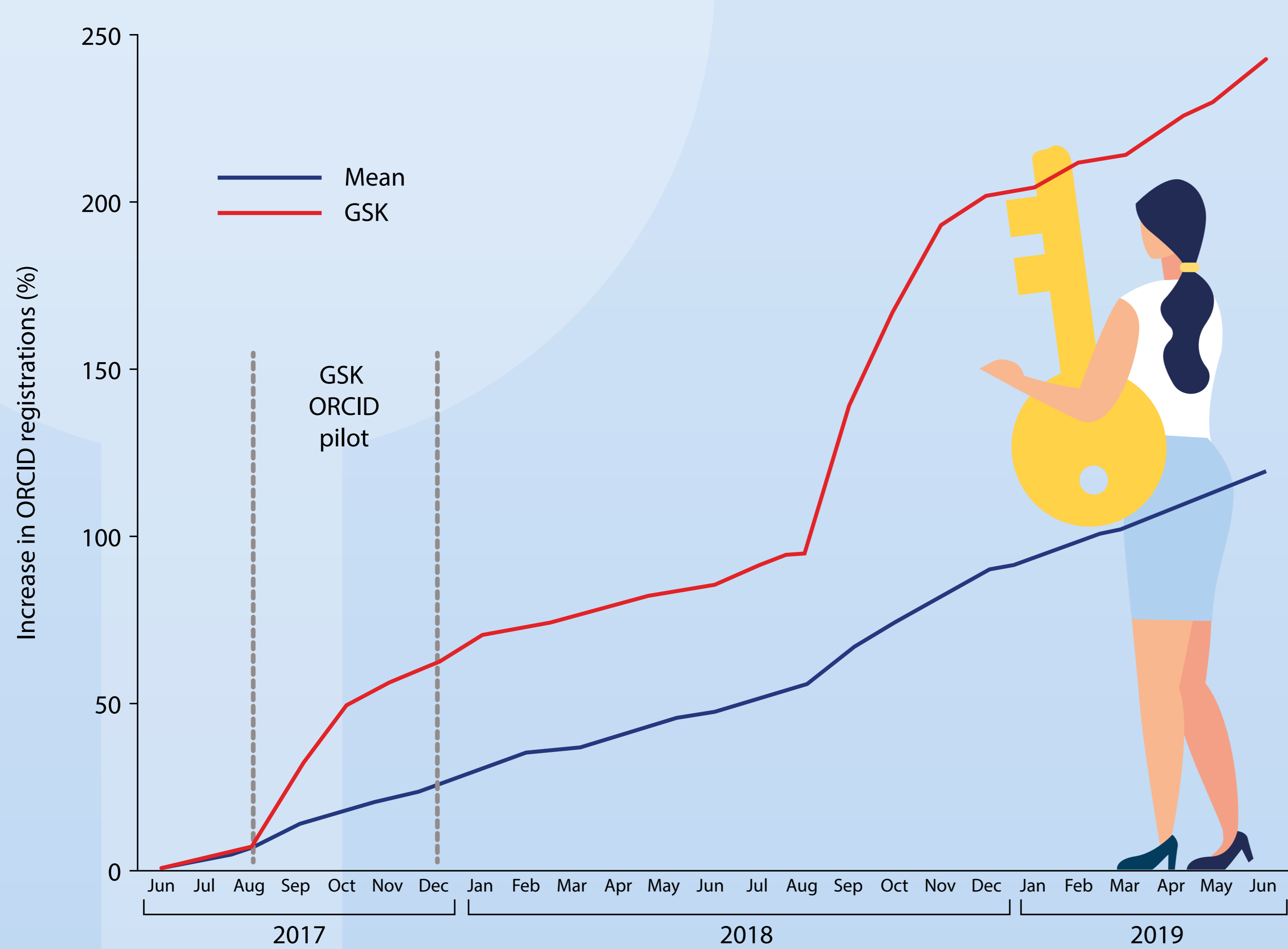


RESULTS

Uptake of ORCID among pharma employees

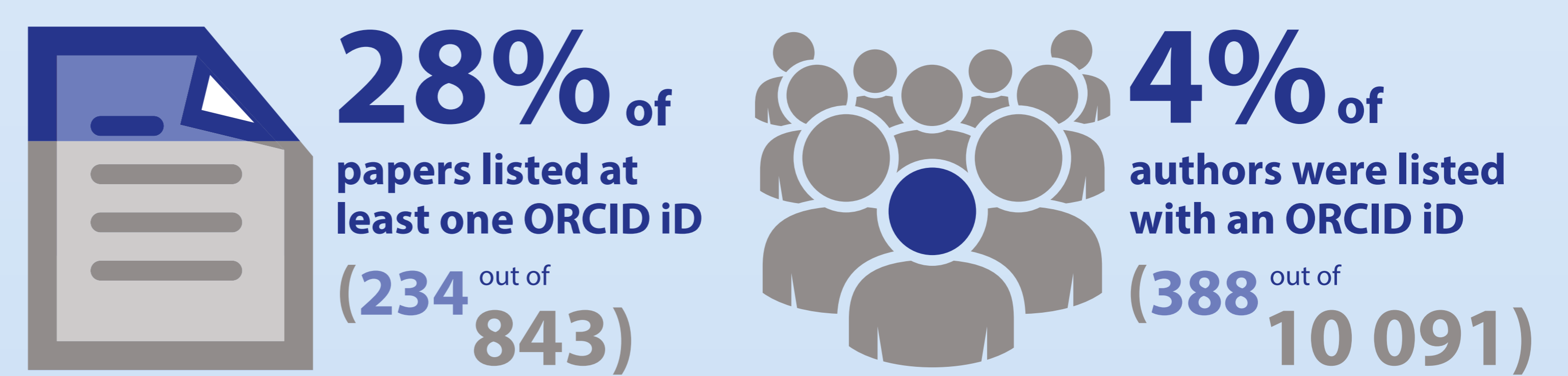
- ORCID registrations by internal employees increased from June 2017 to June 2019 (Figure 2).
- GSK, one of the companies studied, showed a higher than average uptake of ORCID with an increase in registrations of 242% compared with a mean increase of 120% across the six companies combined.

FIGURE 2. ORCID registrations by pharma employees between June 2017 and June 2019.



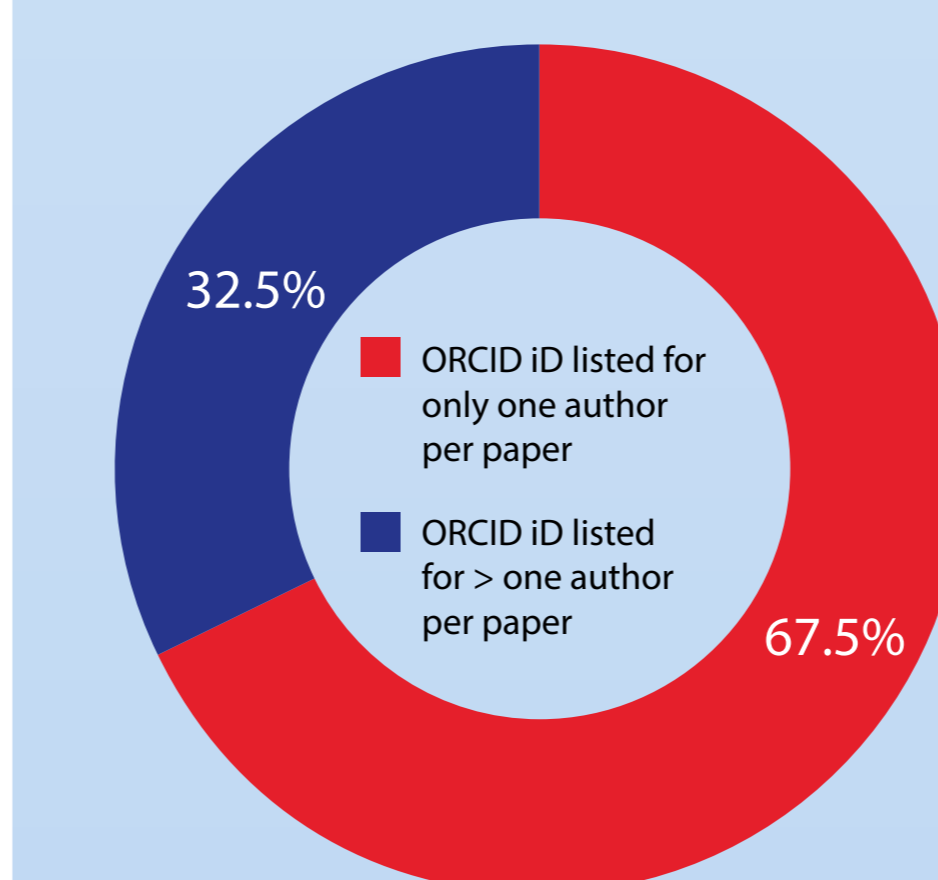
Use of ORCID in publications

- PubMed data were extracted for 843 papers from 346 journals, listing 10 091 internal employees and external collaborators.



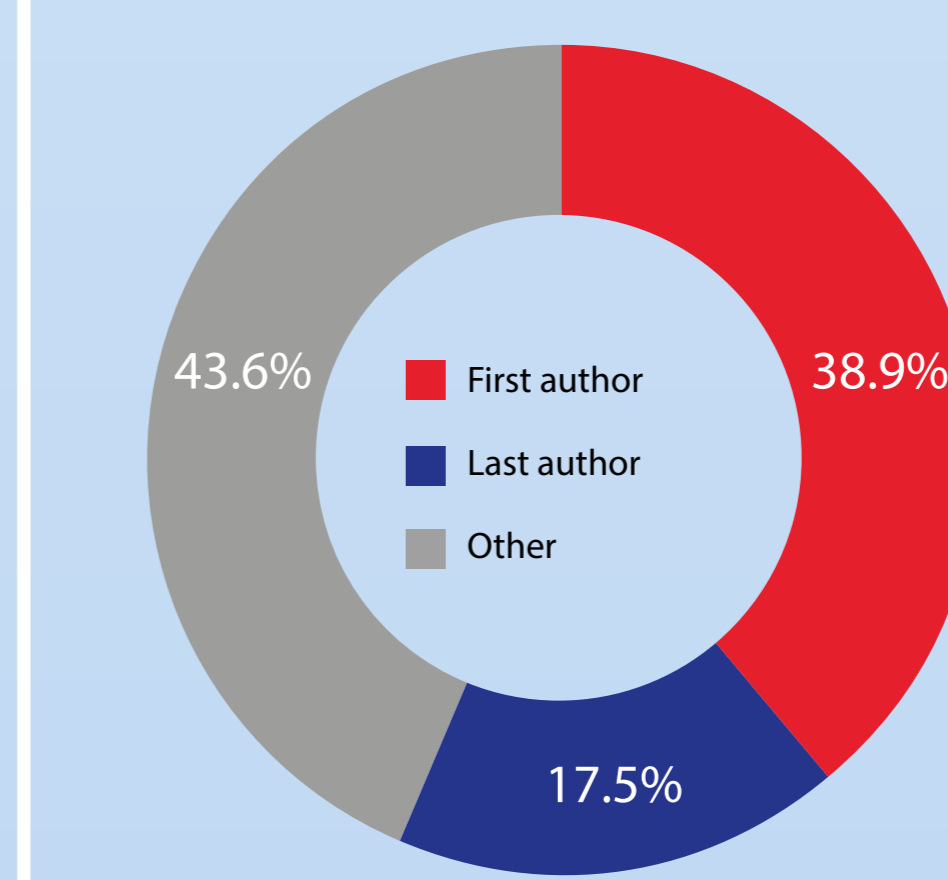
- Papers that listed an ORCID ID mostly did so for only one author (Figure 3).
- ORCID IDs were often provided for the first author (Figure 4).
- Of the 343 unique IDs, 17% (60/343) were affiliated to one of the six companies.
- For authors listed with an ORCID ID and who authored multiple publications, ORCID IDs were mainly inconsistently listed (Figure 5).

FIGURE 3. Papers that listed an ORCID ID.



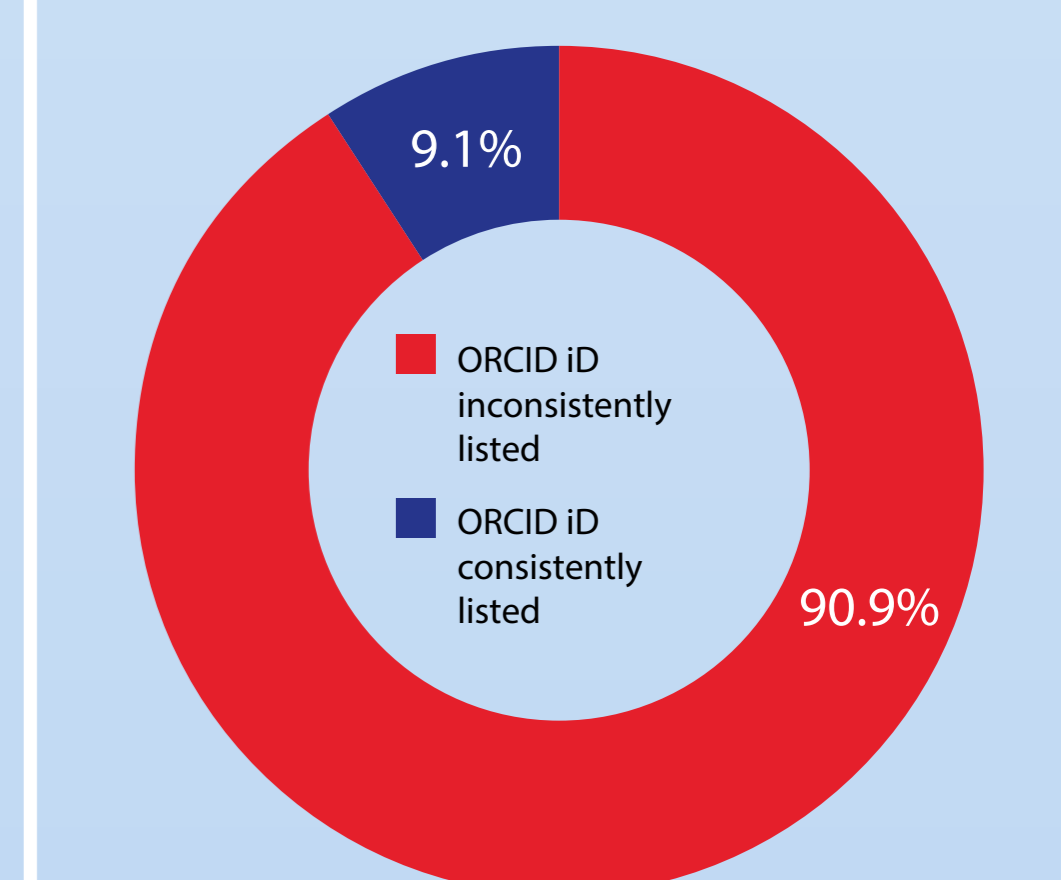
Total number of papers = 234 out of a total of 843 papers ORCID, Open Researcher and Contributor ID.

FIGURE 4. Authors listed with an ORCID ID in the PubMed metadata.



Total number of authors = 388. One author was found to have two ORCID IDs (1/258). ORCID, Open Researcher and Contributor ID.

FIGURE 5. Consistency of ORCID IDs listed with authors who contributed to multiple papers.

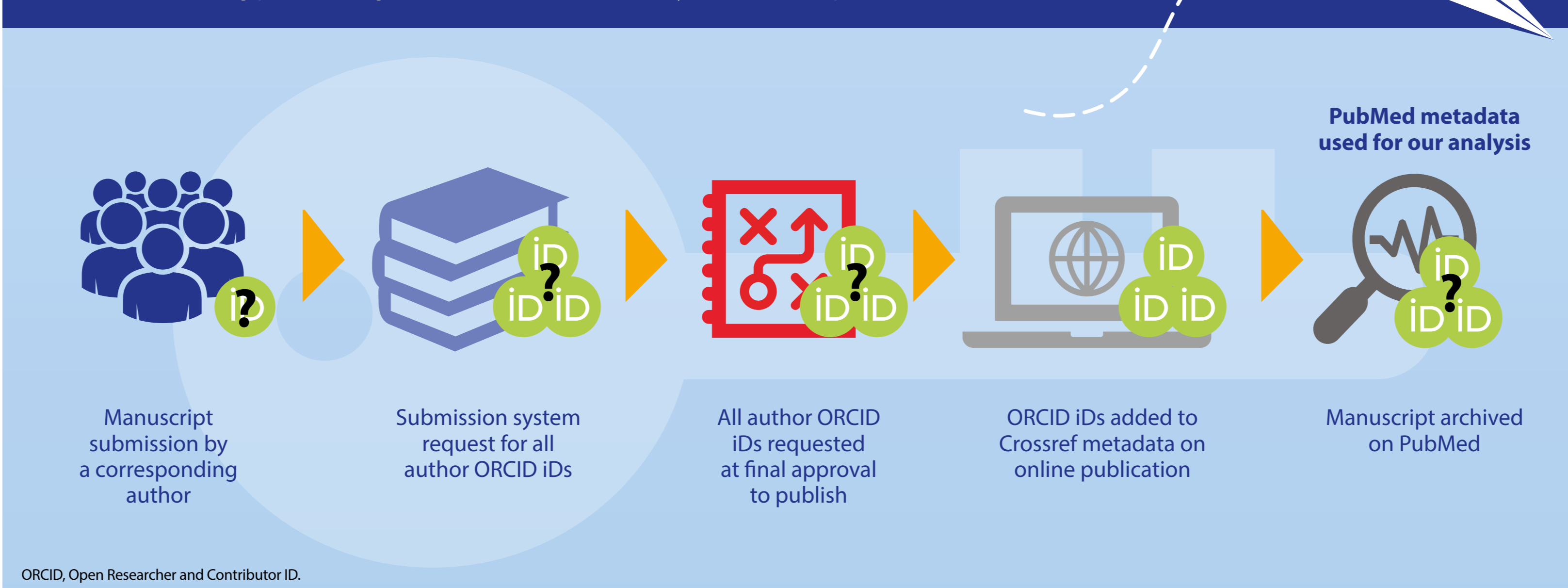


Number of authors = 121. ORCID, Open Researcher and Contributor ID.

STRENGTHS AND LIMITATIONS

- The current analysis assessed the uptake and use of ORCID associated with six of the top pharma companies across a large data set of articles published in a wide range of journals.
- The total number of registered authors captured for individual companies is a minimum case of adoption because authors may not always choose to add their company email domains to their ORCID record.
- Not all registered users would have necessarily published within the period used for the PubMed data extraction.
- The data extracted from PubMed assume that ORCID IDs have been captured during the publication process in order to be entered into the metadata (Figure 6).

FIGURE 6. Publishing process stages at which an ORCID ID may have been captured.



ORCID, Open Researcher and Contributor ID.

CONCLUSIONS

- Registration with ORCID by pharma employees is increasing; however, the inclusion of ORCID IDs in published articles remains inconsistent.
- When ORCID IDs have been listed in publications, it is usually only for a single author.
- ORCID IDs were inconsistently listed for authors who had published multiple articles.
- Educating pharma researchers on the importance and potential benefits of ORCID could help with its adoption, as shown by the GSK pilot, which led to an increase in the uptake of ORCID at GSK.¹
- Implementing ORCID as part of pharma publication management solutions could also help to improve how ORCID is used, with the potential to realize the benefits that it can provide.

DISCLOSURES

MB (<https://orcid.org/0000-0001-7234-3684>) and AM (<https://orcid.org/0000-0003-2161-3781>) were employees of ORCID, Inc. at the time of writing. MB is now an employee of DataCite. AM is now an employee of NISO. AC (<https://orcid.org/0000-0002-8631-3838>) is an employee of ORCID, Inc. SS (<https://orcid.org/0000-0003-0611-6226>), PF (<https://orcid.org/0000-0002-0569-9688>), JM (<https://orcid.org/0000-0002-3419-2181>) and TR (<https://orcid.org/0000-0003-0221-0098>) are employees of Oxford PharmaGenesis Ltd, Oxford, UK.

REFERENCES

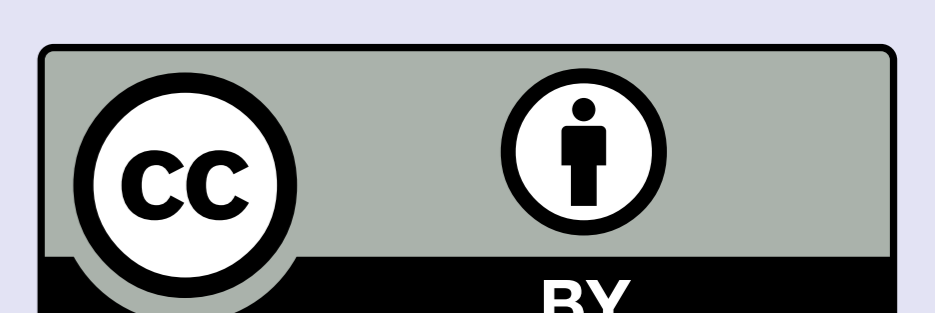
1. Mysore S et al. *Curr Med Res Opin* 2018;34(Suppl 1):29–40.

FUNDING

This study was funded by Open Pharma.

ACKNOWLEDGEMENTS

We thank the Members and Supporters of Open Pharma for their input into the discussions around ORCID, and employees of Oxford PharmaGenesis for their valued input throughout this project.



This work is licensed under a Creative Commons Attribution 4.0 International license