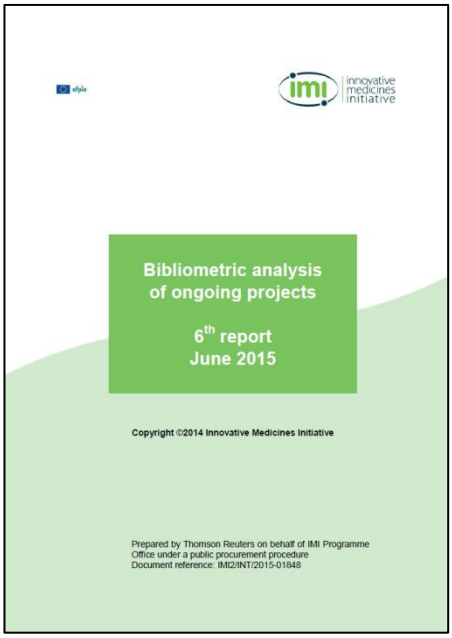
Executive summary
Bibliometric analysis of ongoing IMI projects | 6th report

About the report

The report presents a bibliometric analysis by Thomson Reuters of Innovative Medicines Initiative (IMI) project research published between 2009 and 2014 associated with Funding Calls 1 to 9, and 38 IMI funded projects, using citations as an index of research quality and co-authorship as an index of collaboration. This is the sixth report commissioned by IMI.



The volume of IMI project research is growing fast

The overall volume of IMI project research has increased rapidly since 2009 and the initiative continues to show an exceptionally high growth rate. This is partly to be expected as the number of funded projects rises and those projects funded earliest in the program begin to publish. To date, IMI projects have produced 1 134 publications which have been matched to the Thomson Reuters Web of Science™. This represents a 53.1% increase from the 658 publications matched to the Web of Science in Report 5, which included IMI project research published between 2009 and 2013.

A lot of IMI research is published in high impact journals

Around three quarters of IMI project research has been published in high impact journals, i.e. those journals in the highest quartile ranked by Journal Impact Factor. The average Journal Impact Factor of all IMI project publications was 6.09. IMI project research was wide-ranging – the research portfolio from IMI projects covers diverse research fields from basic biological research to clinical practice. IMI project research has been published most frequently in Pharmacology & Pharmacy, Rheumatology, and Neurosciences journals

IMI project research is of a high quality

The quality of IMI project research (as indexed by citation impact) has been maintained while output has grown. The citation impact of IMI project research (2.19) was more than twice the world average (1.00), which indicates the research was internationally influential. The citation impact for IMI project papers (2.19) was nearly twice the EU's citation impact (1.10), between 2010 and 2014 in similar fields (journal categories). Around one quarter of papers from IMI projects were highly-cited - that is, the papers were in the world's top 10% of papers in that journal category and year of publication, when ranked by number of citations received.

Certain projects are particularly prolific

The output of individual IMI projects has also increased. BTCure (Call 2) was the most prolific project in any of the Funding Calls, with 212 publications as of this report. This is 60.6% increase from the 132 publications attributed to BTCure in Report 5. Among more recent projects, EU-AIMS (Call 3) has shown substantial growth in output, from 41 publications in Report 5 to 73 publications in this report, and its research was cited more than three times (3.37) the world average.

IMI projects are highly collaborative

Projects funded by IMI were highly collaborative. About 60% of all IMI publications were cross-sector (for example, between academic institutions and the pharmaceutical industry). Collaborative IMI project research

was internationally influential with citation impact well above twice the world average with a clear margin over non-collaborative IMI project research. The majority of internationally collaborative papers from the top five projects, ranked by publication output, were co-authored with researchers from the USA, Canada, and Europe.

IMI compares well to well-established funding bodies

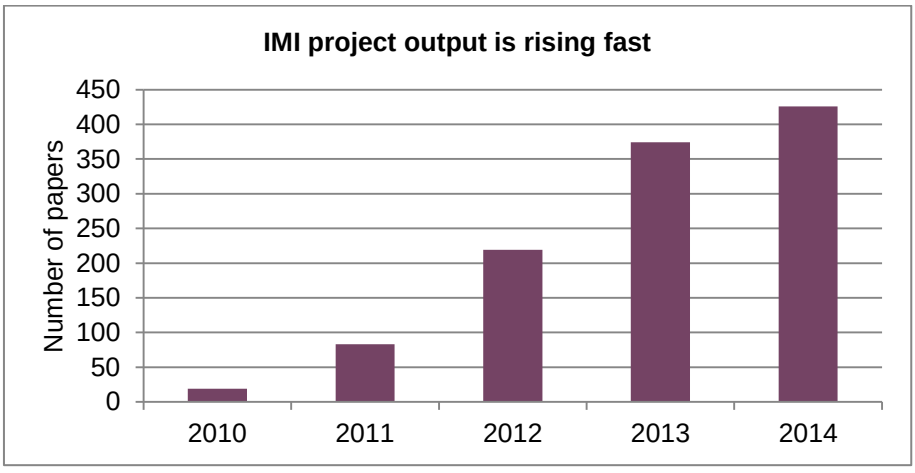
Even though IMI is a 'young' funding agency its performance was on par with the well-established funding bodies such as the Medical Research Council (MRC) and Wellcome Trust, as indicated by the citation impact, and percentage of highly-cited papers (24.0%). In terms of citation impact, IMI's performance was best among the funding organisations analysed.

A more detailed summary of the key findings of this report (with cross-references to the relevant sections of this report) is presented overleaf.

Summary of key findings

As of December 2014, there were 50 IMI projects from Funding Calls 1 to 11, of which 23 were launched since 1 January 2012, and four since 1 January 2014. It may take several months for a project to progress from inception to the point where it has generated sufficient data for a publication. It may take further months or years until it has produced its most valuable results. Many of the IMI projects that are analysed here are still relatively young, and early bibliometric indicators may not fully reflect their eventual impact. More information on all these points can be found in the full report by following the references given.

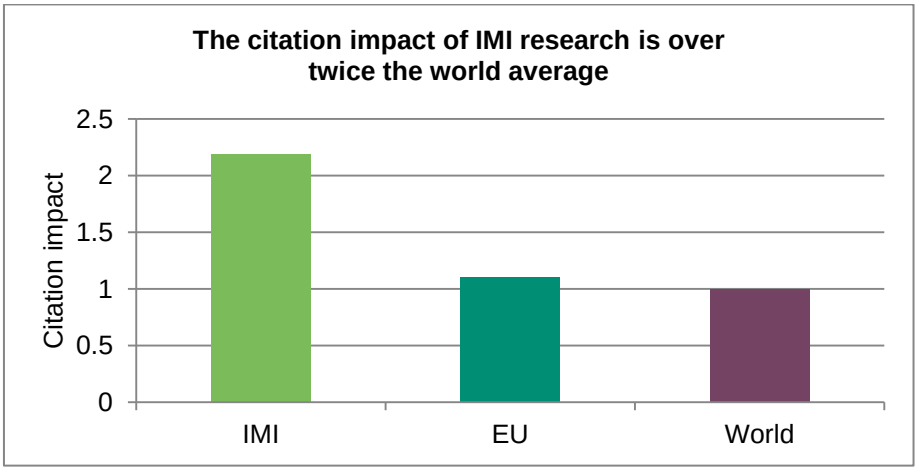
- IMI projects have published a total of **1 134 unique Web of Science publications**. IMI project research continues to show **substantial growth** with research publication count increasing every year between 2009 and 2014.
  → Find out more: p. 14 (Figure 4.1.1) & p. 15 (Figure 4.3.1)



- IMI project publications appeared most frequently in **PLoS One** (58 publications), followed by **Annals of the Rheumatic Diseases** (42 publications). The publications from Annals of the Rheumatic Diseases were exclusively from the Call 2 project BTCure.
  → Find out more: p.18 (Table 4.4.1)
- The highest Impact Factor journal in which IMI project research was published is the **New England Journal of Medicine**, with a Journal Impact Factor of 54.42. IMI project research published five publications in **Nature**, which had a Journal Impact Factor of 42.35.
  → Find out more: p. 19 (Table 4.4.2)
- IMI project research was most frequently published in **Pharmacology & Pharmacy** journals (Figure 4.5.1). Of the 173 papers published in this field, 24.3% of them were highly-cited, 1.7% appeared in open access

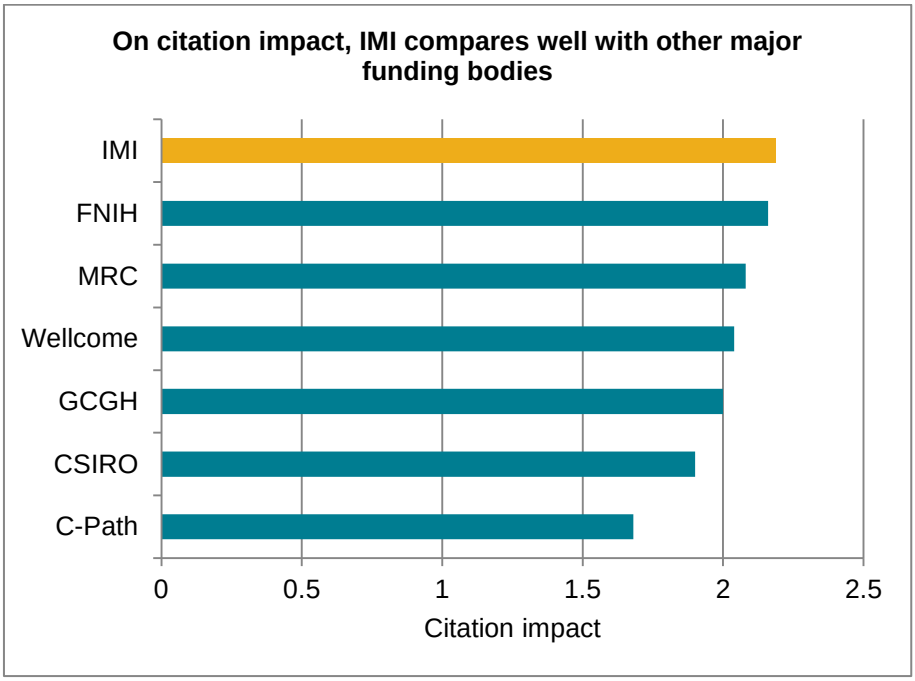
journals, and the average citation impact of these papers is 1.81.
→ Find out more: p. 23 (Table 4.5.3)

- **IMI project research** had a **higher citation impact** for the fields it most frequently published in than the **European (EU-28) papers** for the same research fields (journal subject categories).
→ Find out more: p. 24 (Table 4.6.1)
- **Nearly a quarter (24.0%)** of IMI papers were **highly-cited**, that is, they belong to the world's top 10% of papers in that journal category and year of publication, when ranked by number of citations received.
→ Find out more: p. 25 (Table 4.7.1)
- The **citation impact** for **IMI project papers** was **more than twice the world average (2.19)** over the five-year period, 2010-2014. This indicates that the quality of IMI-associated research (as indicated by citation impact) has been maintained while output has continued to grow.
→ Find out more: p.25 (Table 4.7.1)



- The number of **publications from Call 1** increased every year between 2009 and 2013, peaking at 156 publications, before falling in 2014. The number of **publications for Calls 2, 3, and 4** increased every year preceding the initial set of publications for that call.
→ Find out more: p. 26 (Figure 5.1.1)
- Research associated with five of the **projects in Call 1 (eTOX, NEWMEDS, PRO-Active, SAFE-T, U-BIOPRED)** was cited **over twice the world average**. In particular, research associated with the NEWMEDS project was cited at a level approaching three times the world average (2.83).
→ Find out more: p. 28 (Figure 5.2.1)
- **IMI project research is collaborative at sector, institution and country level.** More than half (59.7%) of all IMI project papers were published by researchers affiliated with more than one sector. More than three-quarters (78.8%) of IMI project papers were collaborative between institutions. More than half (53.4%) of all IMI project papers were internationally collaborative.
→ Find out more: p. 36 (Table 6.1.1)
- **BTCure** had the greatest number of **cross-sector collaborative publications**, 112 out of 212 (53%), as well as the most collaborative publications involving **more than two countries** (108 out of 212).
→ Find out more: pp. 38-40 (Tables 6.2.1 - 6.2.3).
- IMI had the **highest percentage increase** (2142.1%) of its research paper output between 2010 and 2014.
→ Find out more: p. 54 (Table 7.2.1.2)

- IMI had the **highest average citation impact** (2.19) of funding organisations analysed.
  → Find out more: p. 60 (Table 7.3.1)



Read the full report

The full report is online at http://www.imi.europa.eu/webfm_send/1632

Previous editions of the report can be downloaded from
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