

The power of analytics from CRIS systems

**CRIS and possible services of global providers of
scientific information**

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May 2022



Business intelligence tools

Gartner Magic Quadrant for Analytics and Business Intelligence Platforms

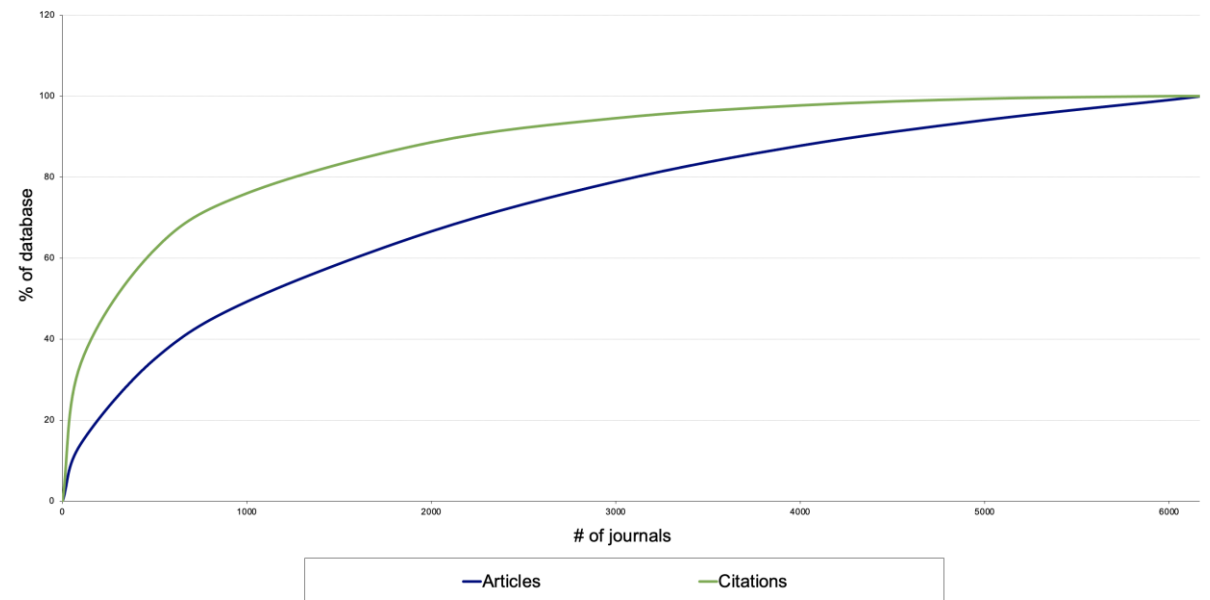


Figure 1: Magic Quadrant for Analytics and Business Intelligence Platforms



Business intelligence tools

- Tools like InCites B&A or Journal Citation Reports use the Web of Science database, which is broad and balanced but will focus on the most impactful publications worldwide
- Other data besides publications are also needed to assess how an institution is performing



Benchmarking tool vs CRIS

InCites



CRIS



Data in a CRIS

Converis/Esploro

Web of Science data

Publications

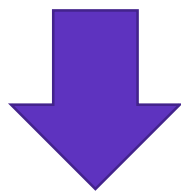
Publication
Metrics

Author data

Journal
Metrics

Funding
Opportunities

Other data



InCites

Benchmarking & Analytics

Web of Science™ APIs

May 2021

The Web of Science Publication APIs complement our suite of RESTful Web of Science APIs to provide complete publication metadata from the Web of Science

Publication metadata



Web of Science API Lite

Support search and data integration using limited Web of Science data re- turned as JSON or XML



Web of Science API Expanded

Support search and data integration using full Web of Science data re- turned as JSON or XML

Publication metrics



InCites API

Support bibliometric analysis and integration of document-level metrics

Journal metadata/metrics



Web of Science Journals API

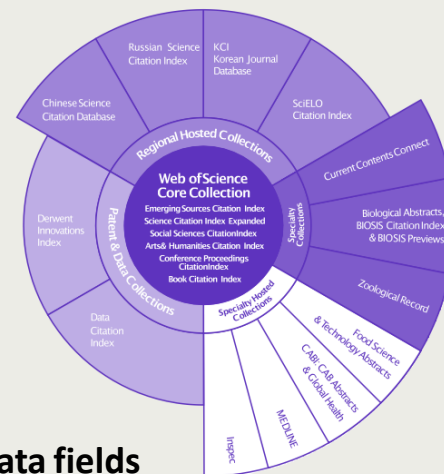
Support bibliometric analysis and integration of journal-level metrics

Coverage

WoS API Lite

Includes the following data

- Web of Science Core Collection
- BIOSIS family (BCI, BIOABS, BIOSIS)
- Current Contents
- Data Citation Index
- Derwent Innovations Index
- Medline
- Zoological records (ZR)



Data fields

WoS API Lite

Authors, Author keywords, RID, Document type, Title, Issue, Pages, Publication date, Source title, Volume, DOI, ISBN, ISSN

WoS API Expanded

WOS Lite fields + PMID, Times cited, Author addresses/affiliations, Grants, Publisher, Related records, citing articles, citing references, Organization enhanced, Author Identifiers

WoS API Expanded

Includes the following data

- Web of Science Core Collection
- BIOSIS family (BCI, BIOABS, BIOSIS)
- CABI
- Current Contents
- Data Citation Index
- Derwent Innovations Index
- FSTA
- INSPEC
- Medline
- Regional content
- Zoological records (ZR)

Example use cases

- **Library:** publication repository updates, advanced search for institute papers
- Clarivate Converis; Symplectic Elements; Elsevier Pure; Interfolio Faculty180; Lyris Dspace, VIVO
- **Research management:** benchmark, collaborations, citations, integration with CRIS
- **Research:** publication and citation analysis, network data, AI, machine learning

API usage

- Query for all publications using WoS advanced search field tags
- Get cited references and citing articles
- Get times cited counts
- Get WoS UTs to quickly identify new publications for your collection

Queries

Boolean AND/+, OR and NOT operators are supported, along with "*" wildcards. Queries can be filtered by values and ranges

See <https://developer.clarivate.com/apis/wos> and <https://developer.clarivate.com/apis/woslite> for more information

InCites Benchmarking & Analytics API™

May 2021

The InCites API complements our suite of RESTful Web of Science APIs to provide complete document-level metrics from InCites

Publication metadata



Web of Science API Lite

Support search and data integration using **limited** Web of Science data re- turned as JSON or XML



Web of Science API Expanded

Support search and data integration using **full** Web of Science data re- turned as JSON or XML

Publication metrics



InCites API

Support bibliometric analysis and integration of document-level metrics

Journal metadata/metrics



Web of Science Journals API

Support bibliometric analysis and integration of journal-level metrics

Coverage

InCites API

Includes the following data

Source: Science Citation Index Expanded

- Social Sciences Citation Index
- Arts & Humanities Citation Index
- Conference Proceedings Citation Index (SCI & SSH)
- Book Citation Index (SCI & SSH)
- Emerging Sources Citation Index



Key features

Includes the following data

Source: Science Citation Index Expanded

- Global evaluation indicators
- Collaboration indicators
- Open access indicators
- Citation Topics
- Trend analysis
- Institutional profiles

Example use cases

- **Library:** publication repository updates, metrics for institute papers
- **Research management:** benchmark, collaborations, citations, integration with CRIS
- **Research:** Retrieve metrics and citation topics for bibliometrics studies

Data fields

- Times Cited
- Document Type
- Journal Impact Factor
- Highly Cited/Hot Paper
- Collaboration indicators (International, industry, International)
- Open Access type (DOAJ Gold, Other Gold, Green Published, Green Accepted, Bronze)
- Normalized metrics (Category Normalized Citation Impact (per category), Journal Normalized Citation Impact)
- Percentile per category

API usage

Queries

Search by WoS accession number (UT) to get document- level metrics

See <https://developer.clarivate.com/apis/incites> for more information

Web of Science™ Journals API

July 2021

The new Journals API complements our suite of RESTful Web of Science APIs to provide complete journal metadata and metrics from the Journal Citation Reports

Publication metadata



Web of Science API Lite

Support search and data integration using **limited** Web of Science data re- turned as JSON or XML



Web of Science API Expanded

Support search and data integration using **full** Web of Science data re- turned as JSON or XML

Publication metrics



InCites API

Support bibliometric analysis and integration of document-level metrics

Journal metadata/metrics



Web of Science Journals API

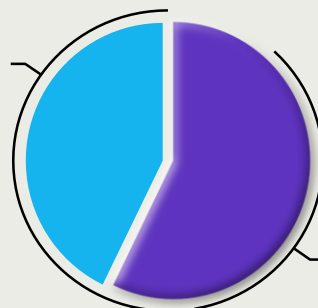
Support bibliometric analysis and integration of journal-level metrics

Coverage

21,000 +

journals covered*
Includes the sciences (SCIE), social sciences (SSCI), and now both the arts & humanities (AHCI) and emerging sources (ESCI)

*From July 2021



All Web of Science Core Collection™ Journals

12,000 +

have a Journal Impact Factor™ (JIF)
SCIE and SSCI

A new normalized journal metric*

Journal Citation Indicator

calculated for all Web of Science Core Collection journals, along with:

- Journal name & ISSN/eiSSN
- Category and rank
- Total cites
- Immediacy Index
- Journal Impact Factor™
- 5-year JIF
- JIF quartile
- Average JIF percentile
- Eigenfactor and Article Influence Score
- Cited/citing half-life
- Citable items
- Open access
- Source data counts

Example use cases

Integrate with internal systems

For example, to pass Journal Impact Factors (JIFs) and Journal Citation Indicators (JCIs) to journal web pages

Bibliometric studies

Access and retrieve core journal metrics for entire categories of groups and journal to include in analyses

API usage

Journal

- Query for all journals or by journal ID
- Get cited and citing journals
- Get journal metrics
- Query for all categories or by category ID
- Get cited and citing categories
- Get category metrics

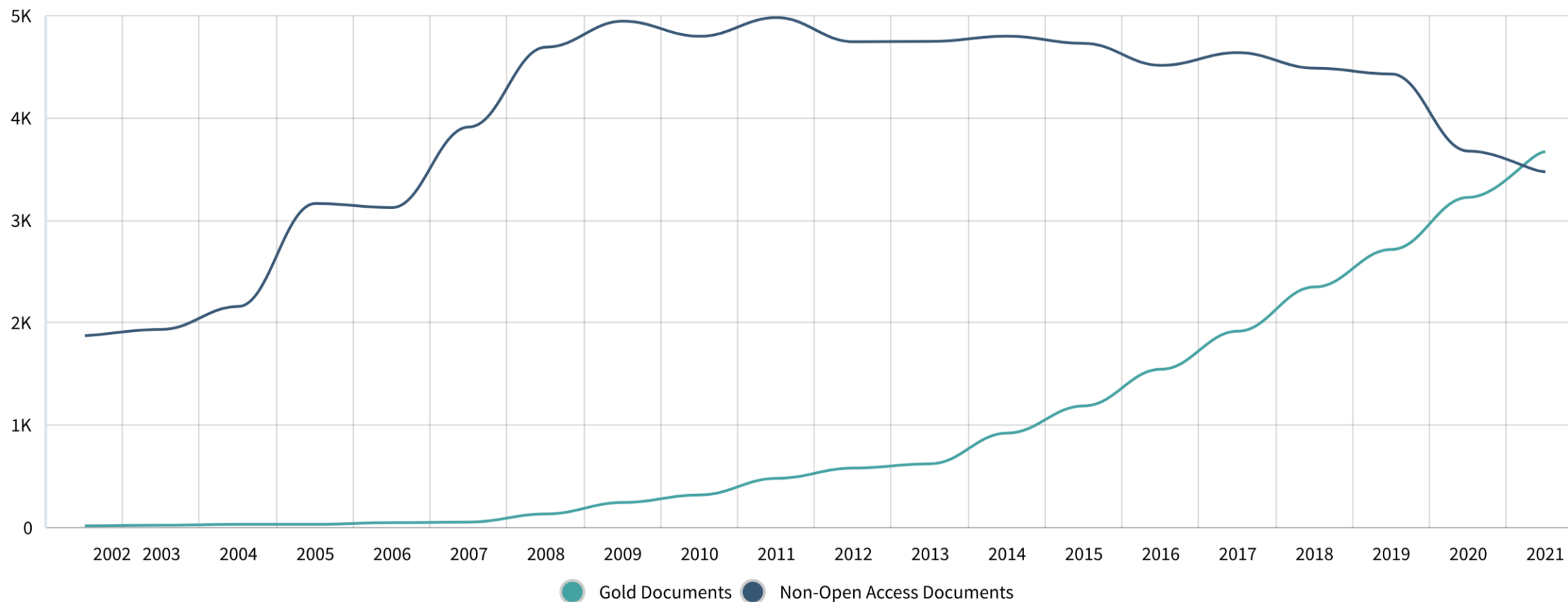
Category

Queries

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See <https://developer.clarivate.com/apis/wos-journals> for more information

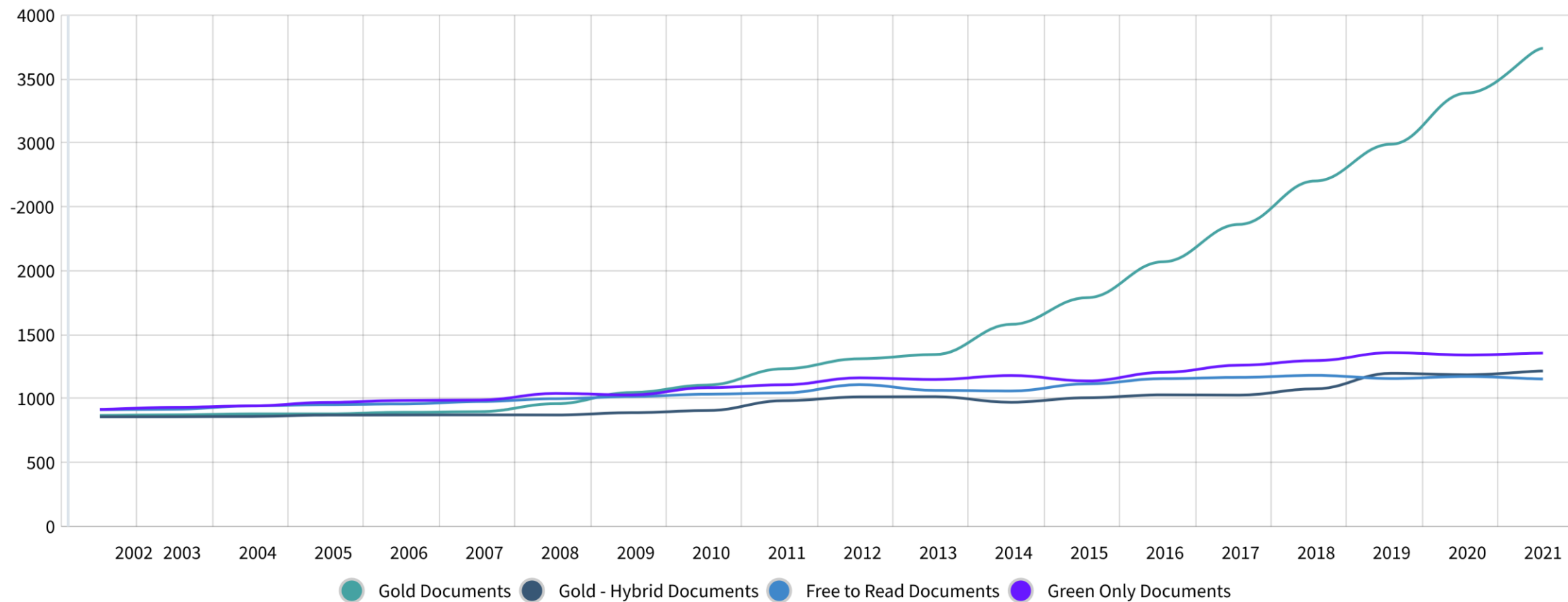
What can it be used for?



Indicators: Gold Documents, Non-Open Access Documents. **Time Period:** 2002-2021. **Schema:** Web of Science. **Location:** CROATIA. **Dataset:** InCites Dataset

InCites dataset updated Apr 29, 2022. Includes Web of Science content indexed through Mar 31, 2022. Export Date: May 13, 2022.

What can it be used for?



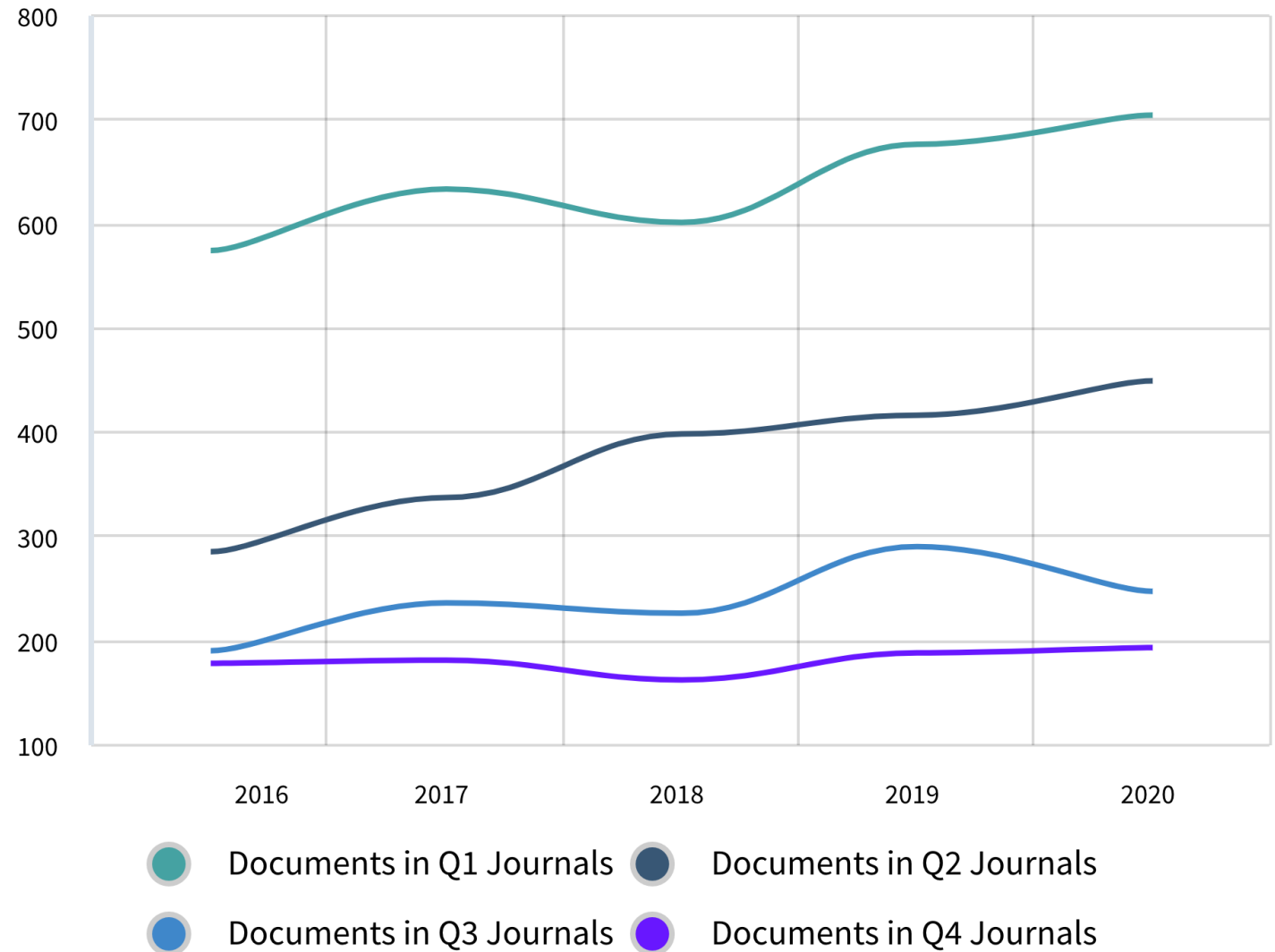
What can it be used for?

- Article and Journal level metrics

Journals API

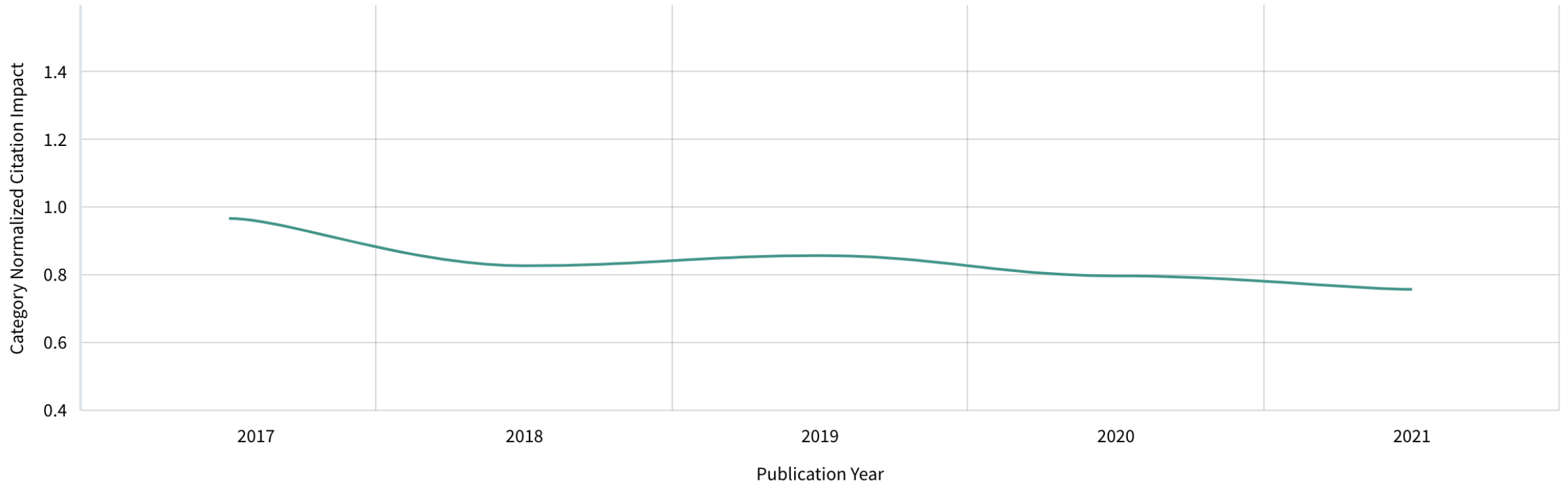
Documents Published per JIF Quartile per Year

How many documents have authors published in highly cited journals?



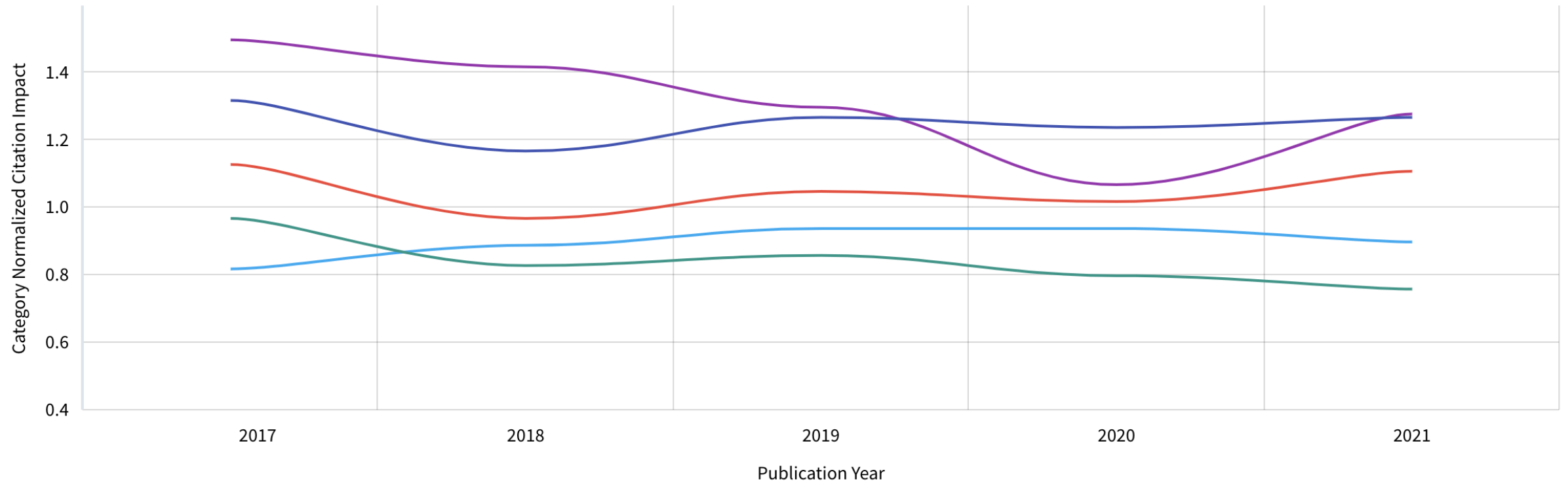
What can it be used for?

- Normalized Article and Journal level metrics



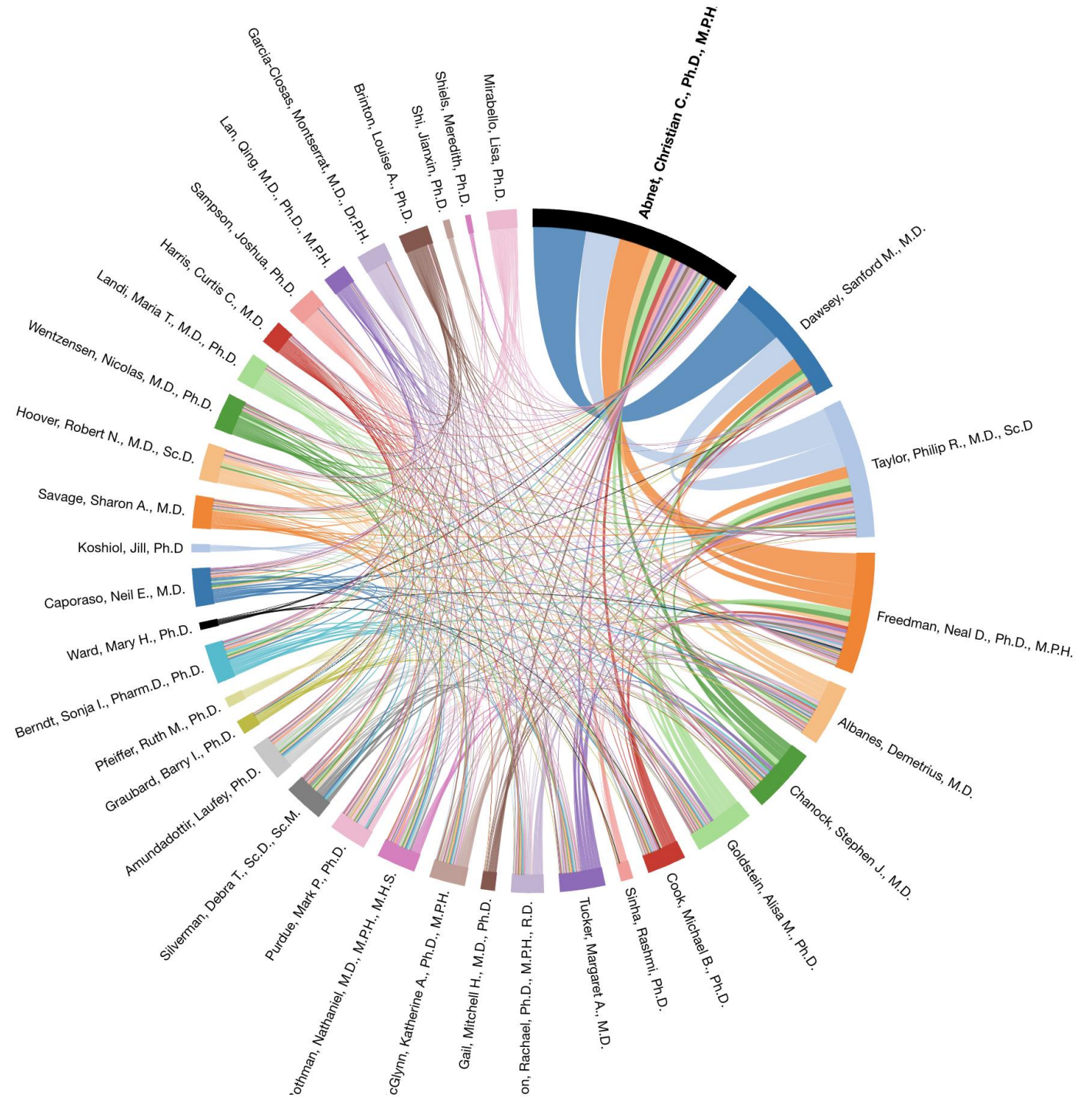
What can it be used for?

- Normalized Article and Journal level metrics



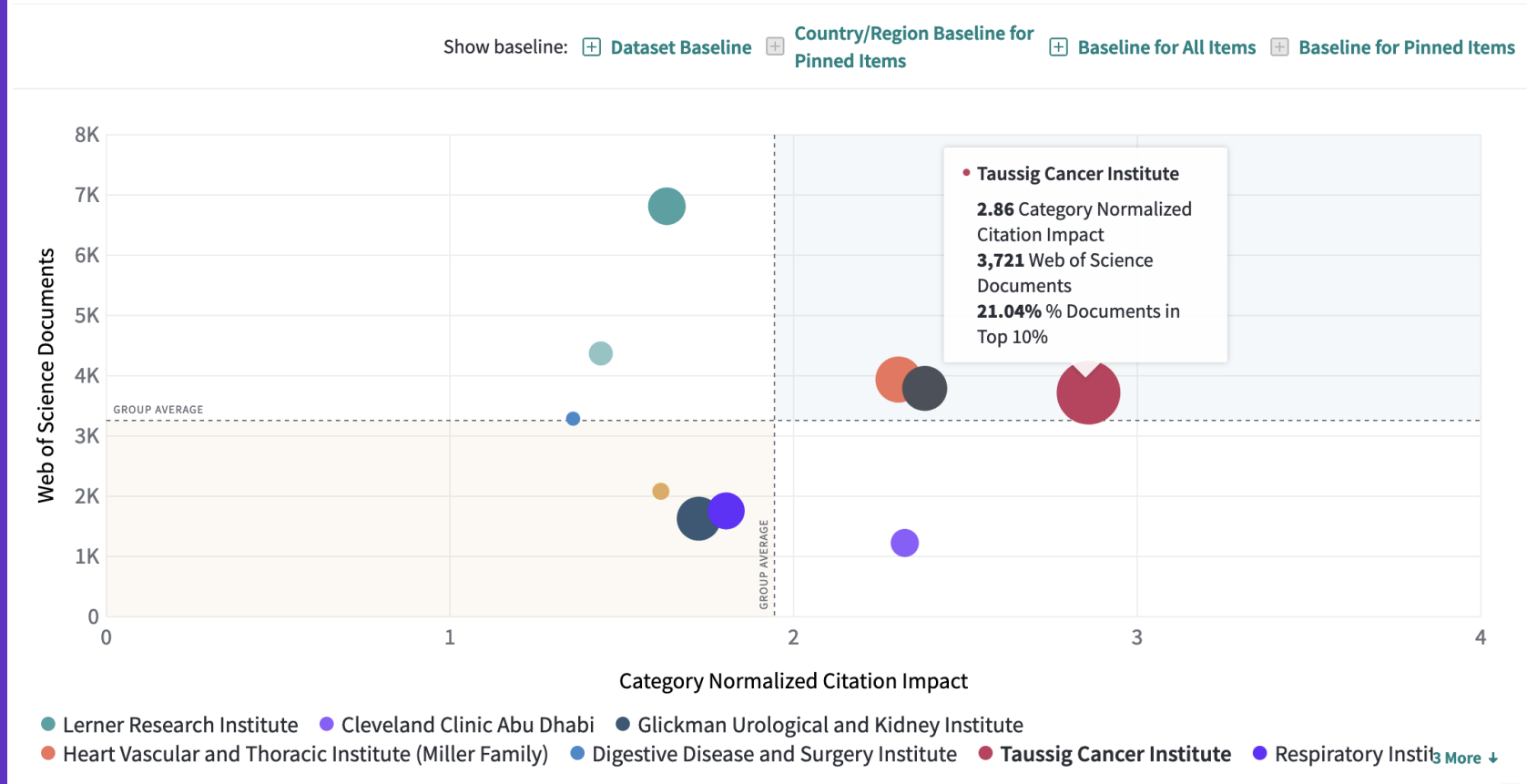
What can it be used for?

- Assessing co-authorship collaborations in VIVO – an example of visualizations based on Web of Science data
- Focusing on production, not impact



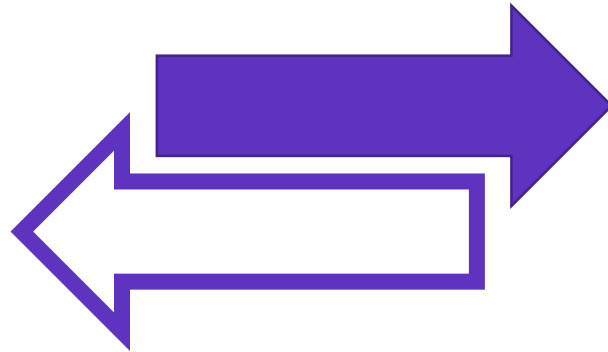
What can it be used for?

- Global and department benchmarking
- Comparing the departments of your institution on publications and metrics, either in your CRIS or in InCites, using **My Organization**



Conclusion

Integrations with the right data sources are crucial to ensure you have all the data you need for appropriate reporting



They also allow you to synchronize this curated data with other systems and benefit from the synergies



Thank you

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