



CWTS DOCUMENTATION

Meaningful metrics

Documentation of dashboards related to bibliometric report for STZ (2013-2022/23)

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Universiteit
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Documentation of dashboards related to bibliometric report for STZ (2013-2022/23)

Report for STZ

Bestuur STZ

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General parameters of the bibliometric report

Parameters

Database	:	Web of Science (Articles, Reviews in the SCIE, SSCI, AHCI, and CPCI)
Version	:	CWTS WOS_2413
Classification system	:	Publication-level classification system (about 4000 fields)
Publication window	:	2013–2022
Citation window	:	Maximum 4 years (and until 2023)
Counting Method	:	Full counting for citation impact measurement
Self-citations	:	Excluded
Top indicators	:	Top 10%

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List of indicators

Output

- IntCov Estimated WoS coverage. Based on the number of references in a WoS publication that is also covered by WoS.
- N pubs The number of publications included in the output analyses.
- P[full] The number of publications, full counting, included in the citation analyses. This is the reason why the numbers may differ from N pubs.
- P[OA info] The number of publications (P[full]) for which OA info is available, in practical sense: publications with a DOI.
- P[OA] The number of publications, full counting, in Open Access(OA), using different kinds of OA: Gold, Hybrid, Bronze or Green. A publication is tagged by one type only. Gold and Hybrid overrule Green. P[OA] is the proportion of publications in Gold, Hybrid, Bronze or Green OA.
- PP[OA] Proportion of publication output, full counting, in Open Access(OA): ratio P[OA] to P[full] (only publications for which OA info is available).

Citation-based impact

- TCS The total citation score. This represents the total number of citations accumulated within the citation window (see parameters), excluding author self-citations.
- MCS The average number of citations received by a publication ($TCS/P[full]$).
- MNCS The mean normalised citation score. This represents the field and year normalised average citation score per publication. Normalisation is based on a detailed publication classification system of CWTS, consisting of about 4000 fields and the year in which it was published. The average MNCS in the entire database is 1. Scores higher than 1 reflect a citation-based impact that is higher than the world average.
- MNJS The mean normalised journal score. This represents a normalised citation-based journal impact score. The MNJS is an average score for all publications in the same journals in which a unit published. The normalisation is based on the same principles as the MNCS. The average MNJS in the entire database is 1. Scores higher than 1 reflect a journal citation impact that is higher than the world average.

$P[\text{top10\%}]$ (not always included but the basis of the different $PP[\text{top10\%}]$ indicators) The number of publications, that belong to the top 10% of their field. The field is determined on the basis of a detailed publication classification system of CWTS, consisting of about 4000 fields (See Annex ??).

$PP[\text{top10\%}]$ The proportion of publications ($P[\text{full}]$) belonging to the top 10% most cited of their field and in the same year. The field is determined on the basis of a detailed publication classification system of CWTS, consisting of about 4000 fields. The $PP[\text{top10\%}]$ in the entire database is 0.10 (or 10%). A score above 0.10 represents impact that is higher than the world average.

For more details about the normalised citation indicators, please refer to [Waltman et al. \(2012\)](#).

STZ hospitals

The list below contains the names of the 27 hospitals included in the study and a 2-4 letters acronym used in tables and graphs.

STZ hospitals

Hospital	Acronym
Albert Schweitzer Ziekenhuis	ASZ
Amphia Ziekenhuis	AMPH
Canisius Wilhelmina Ziekenhuis	CWZ
Catharina Ziekenhuis	CATH
Deventer Ziekenhuis	DZ
Elisabeth TweeSteden Ziekenhuis	ETZ
Franciscus Gasthuis & Vlietland	SFG
Gelre Ziekenhuizen	GELR
Haaglanden Medisch Centrum	HMC
HagaZiekenhuis	HAGA
Isala Zwolle	ISAL
Jeroen Bosch Ziekenhuis	JBZ
Maasstad Ziekenhuis	MAAS
Martini Ziekenhuis	MART
Maxima Medisch Centrum	MMC
Meander Medisch Centrum	MEAN
Medisch Centrum Leeuwarden	MCL
Medisch Spectrum Twente	MST
Noordwest Ziekenhuisgroep	NWZ
OLVG	OLVG
Reinier de Graaf Ziekenhuis	RDGG
Rijnstate Arnhem	RIJN
Spaarne Gasthuis	SG
St. Antonius Ziekenhuis	ANTO
VieCuri Medisch Centrum	VIEC
Ziekenhuis Groep Twente	ZGT
Zuyderland Medisch Centrum	ZUYD

1 Introduction

The study on the hospitals organized under the umbrella of STZ relates to 27 research intensive non-academic (top clinical) hospitals. The report for STZ provides bibliometric evidence for assessing the performance of those 27 hospitals. By means of advanced bibliometric methods and tools, CWTS assesses and characterizes their scientific output, citation-based impact, research and collaboration profiles. The results are generated by quantitative analyses using the STZ oeuvre as far as covered by Web of Science (WoS), a bibliographic database covering international peer refereed journals in all fields of science. This database discloses bibliographic data (including references and citations) of all articles in journals and is processed by CWTS for bibliometric analysis. The report is supported by online dashboards enabling the reader to see the underlying data and further investigate the results as published in a fixed manner in the report for STZ.

The current document is a guide to the dashboards accompanying the report. The three dashboards are discussed separately, each focusing on a specific perspective of the results. You can find extensive introduction to the method in the report itself.

2 Dashboards

We created three dashboards for STZ to explore the results in a flexible way and provide information about the underlying data. Filters and specific selection can be made to get more contextual and detailed information of the results included the CWTS report. We discuss the dashboards separately. They all have a specific focus and/ or perspective.

2.1 General statistics

The dashboard *STZ Overall results* contains the main and key results for STZ at large. Moreover we provide for each selection or filtered data, the underlying publications.

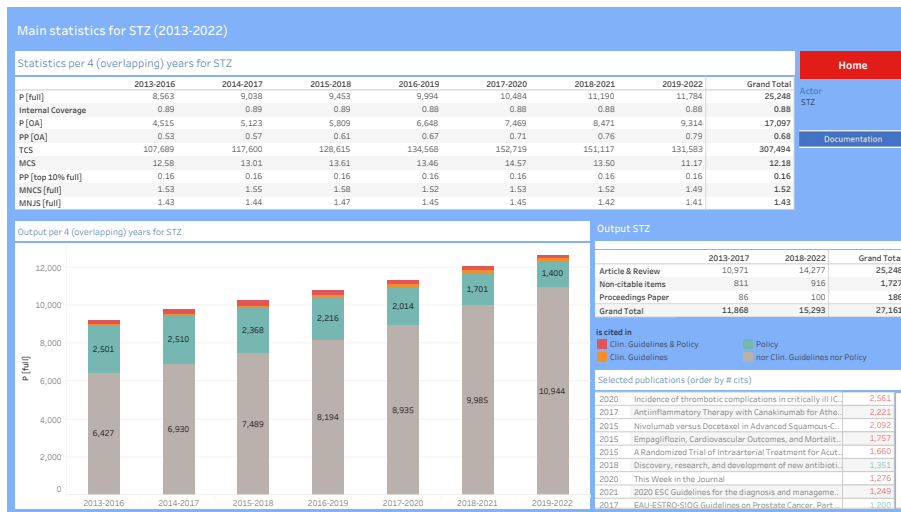


Figure 2.1.1: Dashboard 1: General results

In this dashboard, one can filter the results for STZ at large or select one specific hospital (menu top right). The default is STZ and thus yields the results as they appear in the report. Furthermore, the dashboard consists of four main elements:

- Output by document, per period and overall (top right). we refer to the report for further information. Only here, publications up to 2023 are included as no citation-based information is considered in this table.
- Trend and overall statistics for the unit selected (top left), including impact indicators such as MNCS, MNJS, PP[top10%]. These normalized impact indicators have a benchmark of the world average (1 for MNCS and MNJS and 0.1 for PP[top10%])
- The number of publications per (overlapping) period visualized in a column chart (bottom left). In this chart an indication is given on how many publications are cited in other sources than WoS publications (clinical or practical guidelines GL or policy documents PL, or both): red if cited both in guidelines and policy, orange if cited only in guidelines and green if cited only in policy documents. This specific information is not included in the report.

- A list of publications underlying the selection (the unit or filtered period). the color-coding of the number behind a publication matches the coding of the column chart (bottom left).

There are a few additional ways to filter the data and results. First of all, one can select a hospital or STZ at large. Secondly, one can select a specific period of interest, by clicking for example on one specific period in the column chart (bottom left).

Finally, there is a way to view more information about a specific publication by clicking on one, and even open the full text by selecting 'open publication' in the menu (this may sometimes be limited to the ones published in Open Access).

2.2 Profiles (subjects and collaborations)

Dashboard profiles contains the main and key results for STZ at large plus the profiles (subject and collaboration type), in the way most of it was included in the report. We also include a list of co-authoring institutions (including STZ hospitals) for the selected unit. Moreover we provide for each selection or filtered data, the underlying publications.

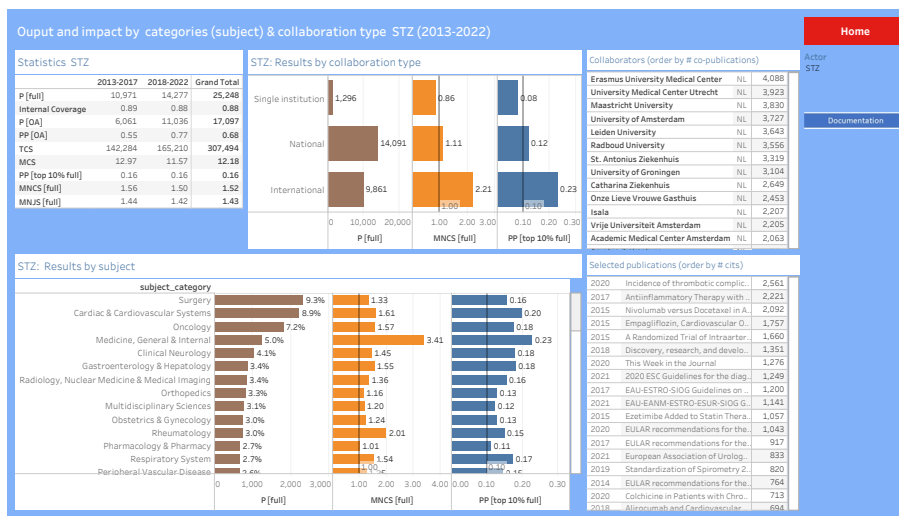


Figure 2.2.1: Dashboard 2: Profiles

In this dashboard, one can filter the results for STZ at large or select one specific hospital (menu top right). The default is STZ and thus yields the results as they appear in the report.

Furthermore, the dashboard consists of five elements:

- 5 years' trend and overall statistics for the unit selected (top left).
- Output and impact distributed over collaboration types (top centre)
- Output and impact distributed over subjects/categories (bottom left)
- List of collaborating organisations in selected (filtered) set of publications (top right)
- List of publications underlying the selected set (bottom right)

In this dashboard, several subsets can be defined to explore results from different perspectives. We allow the following subsets:

- selection of one of the two preset 5-years periods (2013–2017 or 2018–2022) by clicking on it in the table (top left)
- selection of a specific collaboration type by clicking on one of the types in the bar chart elements (top centre)
- selection of a specific subject by clicking on one in the bar chart elements (bottom left)

By selecting one of the above options, the results will be adjusted using the selection. Combinations of options is also possible.

TIPS: you can deselect an option by clicking another one or clicking the selection again

Again, there is a way to view more information about a selected publication by clicking on one, and even open the full text by selecting 'open publication' in the menu (this may sometimes be limited to the ones published in Open Access).

2.3 Bibliometric performance for selected units

In the *Dashboard hospitals*, we provide overall bibliometric results for selected hospitals. Moreover, we provide the possibility to display statistics and visualizations using a specific indicator (top right).

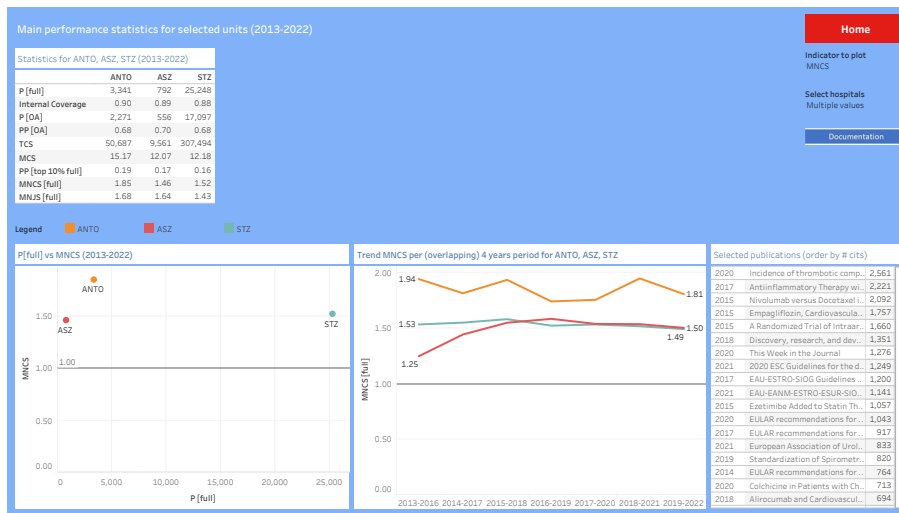


Figure 2.3.1: Dashboard 3: Comparing hospitals

The dashboard consists of four elements:

- The main results (indicators) for all years for all selected units (hospitals or STZ). These can be selected in a drop-down menu (right-hand side: 'Select hospitals')
- A chart in which the selected units are plotted in relation to each other: P[full] vs. a selected indicator. This indicator can be selected on the right-hand side as well 'Indicator to plot'. The options are MNCS, MNJS, PP[top10%] or PP[OA]. The normalized impact indicators have a benchmark of the world average (1 for MNCS and MNJS and 0.1 for PP[top10%])
- Another chart shows the trend for each of the selected units using the selected indicator (bottom centre).
- A list of publications for the selected units.

References

Ludo Waltman, Clara Calero-Medina, Joost Kosten, Ed C. M. Noyons, Robert J. W. Tijssen, Nees Jan van Eck, Thed N. van Leeuwen, Anthony F. J. van Raan, Martijn S. Visser, and Paul Wouters. The Leiden ranking 2011/2012: Data collection, indicators, and interpretation. *Journal of the American Society for Information Science and Technology*, 63(12):2419–2432, December 2012. ISSN 1532-2890. doi: 10.1002/asi.22708. URL <https://onlinelibrary.wiley.com/doi/abs/10.1002/asi.22708>.