



The International Impact of Chinese Hospital Research 2025

A Report on 20 Years' Health Policy and
Clinical Guideline Citations Worldwide

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Executive Summary

The ultimate goal of medical research is to improve health outcomes by informing policies and clinical practice. One way to measure this influence is through citations in health policy documents and clinical guidelines, where research evidence is translated into actionable recommendations for healthcare professionals.

This report assesses the global impact of medical research from Chinese hospitals between 2005 and 2024, with a focus on ten leading institutions with the highest number of articles cited by in health policies and clinical guidelines internationally. Collectively, researchers from these hospitals produced 12,601 articles that were cited 34,675 times in health policy and clinical guideline documents worldwide. These figures highlight the measurable influence of Chinese medical research on decision-making processes that shape clinical care and public health across diverse health systems.

The findings demonstrate how hospital-based research in China has contributed to the development of evidence-based policies and practices beyond national boundaries. They show that Chinese hospitals are playing an increasingly important role in shaping international standards of care, improving healthcare delivery, and advancing outcomes for patients globally.

Key findings:

- ◆ **Scale and reach:** From 2005–2024, the ten hospitals' research was cited **34,675** times in health policy and clinical guidelines spanning over **75 countries** (notably the USA, UK, and Germany), evidencing sustained global uptake.
- ◆ **Who cites the work:** Leading organisations citing this research include the **World Health Organisation (WHO)**, the UK's **National Institute for Health and Care Excellence (NICE)**, Germany's **Arbeitsgemeinschaft der Wissenschaftlichen Medizinischen Fachgesellschaften (AWMF)**, and **Canada's Drug Agency**, indicating broad international influence.
- ◆ **Where it's published:** Original studies appear in high-impact journals such as **The BMJ, Gut, JAMA, The Lancet, Lancet Oncology, and NEJM**.
- ◆ **How the examples were chosen (not a league table):** The ten hospitals were selected as **case studies** based on total numbers of cited articles identified via BMJ Impact Analytics; many other Chinese hospitals also contribute substantially and may be profiled in future editions.
- ◆ **Interpretation note:** Coverage of non-English guideline repositories can vary (e.g., Arabic-speaking countries, Russia, parts of China), so citations from these regions may be **under-represented**; figures should be read with this in mind.

Introduction

Medicine in China has advanced steadily over the past two decades, with a marked shift toward rigorous evidence-based practice aligned to global clinical and research standards. This evolution has been supported by large-scale investment in hospital infrastructure, the adoption of randomised controlled trials, and active participation in multinational research collaborations. As a result, Chinese hospitals and universities are increasingly producing high-quality research that contributes to healthcare advancement globally, particularly in oncology, cardiology, and infectious diseases. This growth has fostered cross-cultural exchange and expanded the evidence base for both conventional and complementary medicine, underpinning China's emergence as a global leader in medical research.

This expansion in output has been mirrored by rising citations of research from China in international policy and guideline documents. Citations in accessible clinical guidelines and policies enhance a study's visibility and impact, turning academic findings into actionable elements of medical practice. When research is embedded in guidance used by healthcare professionals worldwide, it informs clinical decision-making, supports the standardisation of care, and ultimately improves patient outcomes. Open-access guidance also helps lower-resource settings benefit from evidence-based recommendations, reducing global disparities in care. In addition, guideline citations increase the notability of research centres, strengthening their ability to attract funding and collaborations and shape future research priorities.

This report does not aim to rank hospitals against one another. Instead, it highlights ten leading Chinese hospitals based on the number of cited articles in international health policies and clinical guidelines. These case studies illustrate China's growing role in global medical research and its translation into practice.

For this report, the publication output from ten selected Chinese hospitals was analysed to assess the extent to which their research has informed health policy and clinical guidelines. The analysis focuses on both the volume of research publications and the progression of these outputs into citations by health policies and guidelines. It also identifies the main organisations citing this research and the geographic coverage of those organisations. This approach provides a clear indication of the practical influence of hospital research on healthcare decision-making and practice.

The findings show that research from these institutions extends beyond academia to shape national health strategies and clinical practice, ultimately contributing to improved patient outcomes. This underscores the importance of evidence-based medicine in guiding decisions across multiple levels of healthcare and demonstrates that academically rigorous research can be both credible and applicable in real-world contexts. The analysis was conducted using BMJ Impact Analytics (see Methodology), providing a robust assessment of how academic outputs from the selected hospitals translate into real-world influence.

The ten hospitals with highest number of cited articles are as follows:

	Title	Cited research outputs	Total health policy and clinical guideline cites
1	West China Hospital of Sichuan University (WCHSU)	2189	5073
2	Peking Union Medical College Hospital (PUMCH)	1835	5752
3	First Affiliated Hospital of Sun Yat-sen University (FAHSYU)	1821	4217
4	Tongji Hospital Affiliated to Tongji Medical College of Huazhong University of Science & Technology (TH)	1240	4674
5	Union Hospital Tongji Medical College Huazhong University of Science & Technology (UH)	1160	3260
6	Peking University First Hospital (PUFH)	994	3614
7	Ruijin Hospital (RUH)	937	2602
8	Sun Yat-sen University Cancer Center (SYUCC)	920	1999
9	Renji Hospital (ReH)	757	1604
10	Fudan University Shanghai Cancer Center (FUSCC)	748	1880

Methodology

Scope and tools

We used BMJ Impact Analytics to identify citations of research in health policy documents and clinical guidelines worldwide. The tool searches documents from 41,000+ organisations, across 2,000+ policy sources and ~10 million health-related documents. It is currently the only analytics tool dedicated to health and social care, and is used by funders, national public health agencies, public health systems such as the NHS in the UK and industry to track the real-world impact of research. This specialised focus and breadth make it well suited to assessing how research influences patient care and professional guidance; hence its use in this report.

Search strategy and period

For each of the ten profiled hospitals, we searched BMJ Impact Analytics for outputs within 2005–2024 and used these data to inform the narrative and figures. Visualisations were generated from extracted citation metrics, institutional outputs, authorship data and international guideline citations. We also distinguished COVID-19 and non-COVID-19 research to reflect pandemic-related dynamics.

Why these ten hospitals (not a ranking)

The 10 hospitals included in this report were selected because they are the Chinese institutions with the highest number of cited articles in health policy and clinical guidelines between 2005 and 2024, as identified through BMJ Impact Analytics. Selection was based on the volume of outputs cited in policy or guideline documents not total citation numbers, reflecting demonstrable influence on evidence-based decision-making worldwide. Importantly, this is not a ranking or league table; rather, it is a case-study sample chosen to illustrate the breadth and depth of Chinese hospital research that is shaping global healthcare practice. Many other hospitals in China are also making significant contributions, and future editions of this report may extend the scope to include a wider range of institutions.

Authorship inclusion rationale

Analyses include publications where a researcher from the hospital is listed as first author, corresponding author, or co-author. We did not restrict to first or corresponding papers only, because modern advances are often delivered by multinational consortia, where Chinese hospitals contribute specialist expertise, trial sites, or patient cohorts without necessarily leading the paper. Including all authorship positions provides a more complete picture of real-world influence - capturing both China-led and collaborative contributions to guidance and policy. For each hospital we also highlight the most cited articles with the first or corresponding author affiliated to that institution.

Data handling and verification

Hospital names were standardised to avoid duplication; data were verified against original publications and official databases; and references were formatted using the Vancouver style to maintain rigour and transparency.

Limitations

Causality and timing

A citation in a policy or guideline indicates influence, not causation. There is also a time lag between publication and uptake, meaning some studies' ultimate impact may not yet be visible. During COVID-19, however, this pattern shifted: there was both a sharp increase in research output and an unusually rapid incorporation of articles into policies and guidelines. This surge created a temporary peak in influence that differs from the longer-term trends usually seen in medical research which has been captured in the results.

Coverage of non-English policy sources

Although BMJ Impact Analytics has broad reach, coverage can be variable in non-English-speaking regions (e.g., Arabic-speaking countries, Russia, and parts of China) where national repositories may be less accessible, not fully indexed, or available only in local languages. Where possible we cross-checked institutional/regional sources and verified affiliations; nevertheless, citations from these regions may be under-represented, and geographic spread should be interpreted with this in mind.

Attribution and authorship

Including all authorship positions offers a comprehensive view of contribution but makes it harder to isolate purely China-led outputs. To balance this, we highlight first/corresponding-author examples in hospital tables where relevant, while retaining the broader lens for policy/guideline influence.

Conclusions

Over the past two decades, Chinese medical research has expanded rapidly, supported by sustained investment, rigorous adoption of evidence-based practice, and growing integration into multinational collaborations. This report's analysis of ten hospitals (a case-study sample, not a ranking) shows how China has moved from locally significant work to producing internationally recognised evidence that shapes health policies and clinical guidelines in over 75 countries. Citations from world-leading organisations - including WHO, NICE, and AWMF - underscore the credibility and global reach of this research.

A defining feature of this progress is its breadth: oncology, cardiology, nephrology, infectious diseases, and more. Citation patterns reveal both rapid responses to urgent challenges (e.g., during COVID-19) and durable contributions that inform standards of care over time. By counting studies where Chinese hospitals appear in any authorship position (first, corresponding, or co-author), the report captures the real contours of modern science—delivered through multinational consortia in which Chinese institutions contribute critical patients, methods, and expertise, whether or not they lead the paper.

These findings highlight a research ecosystem that translates academic rigour into practice-changing guidance, improving outcomes across diverse health systems. At the same time, they should be read with appropriate caution: citations indicate influence, not causation, some impacts emerge only after a time lag, and coverage of non-English guideline repositories (e.g., Arabic-speaking countries, Russia, parts of China) may be under-represented.

Call to action. To sustain and amplify this trajectory, China's research community and partners can: continue investing in clinical research capacity; prioritise high-value questions aligned to patient and system needs; strengthen international and cross-disciplinary collaborations; expand bilingual/open dissemination of guidance; and work with regional agencies to improve indexing of non-English policy sources. Future editions of this report will broaden hospital coverage, add field-specific deep dives, and further link policy citations to implementation and patient-level outcomes—advancing the shared goals of openness, cooperation, co-construction, and sharing.

Ten Hospitals

This section presents concise profiles for ten Chinese hospitals with the highest number of cited articles. For each hospital, we show: (1) a short profile; (2) data illustration (key metrics and journals); (3) policy/guideline uptake (top citing organisations and total citations); (4) geographic reach; and (5) two tables listing the ten most-cited articles for COVID-19 and non-COVID-19 topics, and where relevant, we flag papers with a first or corresponding author from the hospital while retaining the broader set of contributions that reflect multinational collaboration.

“Articles” refers to all related outputs that have been cited in health policy or guideline documents.

How to read the metrics

- ◆ **Cited research outputs:** Number of unique articles with any hospital-affiliated author (first, corresponding, or co-author) that have been cited at least once in a policy or clinical guideline.
- ◆ **Total policy/guideline cites:** The total number of citations those articles have received across health policy and clinical guideline documents worldwide (one article may be cited multiple times and by multiple organisations).
- ◆ **Top citing organisations/global impact:** Leading policy and guideline bodies citing the hospital’s research, plus a summary of country coverage to indicate international uptake.

West China School of Medicine / West China Hospital of Sichuan University

West China Hospital, Sichuan University (WCH, SCU) was founded in 1892 and recognised as a national general hospital and a diagnosis and treatment centre for complex and critical diseases. It is also a national base for top-tier medical research and technological innovation, boasts a strong and comprehensive range of medical disciplines and ranks highly in the world for clinical medicine, according to the Essential Science Indicators (ESI, top 0.297‰).

Data illustration



Since 2005, **2,189** research articles, with any China based author affiliated to WCHS/WCH have been cited in policy and/or clinical guidance documents.



Contributions span key disciplines including oncology, neurology and neurosurgery, cardiology, and cardiovascular medicine. Articles are published in leading international journals including Journal of the American Medical Association (JAMA), The Lancet, Lancet Oncology, New England Journal of Medicine, European Heart Journal, and BMJ, reflecting the hospital's expertise.



Articles have been cited **5,073** times - health policy and clinical guideline citations are shown in **Diagram 1**. Top five citing organisations: National Institute for Health and Care Excellence (NICE), World Health Organisation (WHO), Arbeitsgemeinschaft der Wissenschaftlichen Medizinischen Fachgesellschaften (AWMF), Canada's Drug Agency, Agency for Healthcare Research and Quality (AHRQ).



Global impact is illustrated in **Diagram 2**, with citations spread across 65+ countries: top 10 countries include the USA, UK, and Germany, demonstrating significant international reach.



Tables 1 and 2 show the top 10 most cited research outputs whereby the first or corresponding author is from WCHSU for both Covid and non-Covid related outputs.

Diagram 1

Health policy and clinical guideline citations, by source

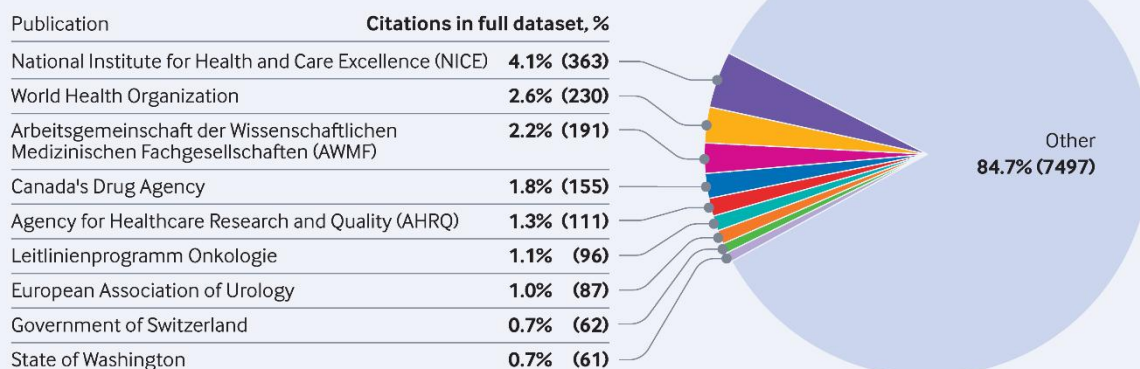
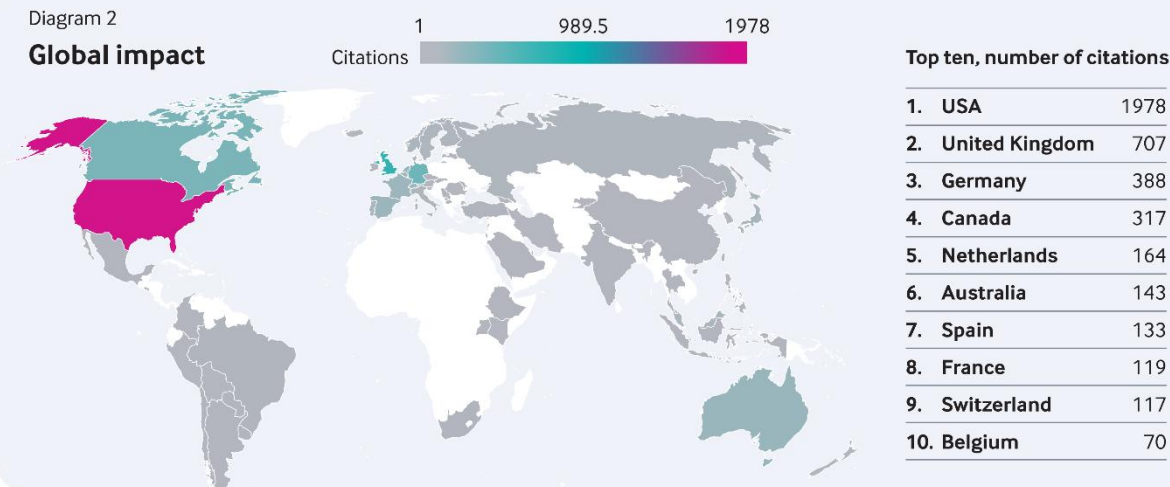


Diagram 2

Global impact



10 most-cited articles

Table 1.

Covid research outputs,

first or corresponding author from WCSM/WCH

Title	Citations
1. The impact of COPD and smoking history on the severity of COVID-19	34
2. Chest CT manifestations of new coronavirus disease 2019 (COVID-19)	9
3. Pre-pandemic psychiatric disorders and risk of COVID-19	7
4. Why did so few healthcare workers in China get COVID-19?	7
5. Hospital Emergency Management Plan During the COVID-19 Outbreak	5
6. The Application of Hazard Vulnerability Analysis in the Field of COVID-19	4
7. A novel risk score to predict diagnosis with coronavirus disease 2019 (COVID-19)	4
8. Asymptomatic COVID-19 Patients Can Contaminate Their Surroundings	4
9. The Battle Against Coronavirus Disease 2019 (COVID-19)	4
10. Development and utilization of an intelligent application for COVID-19	4

Table 2.

Non-covid research outputs,

first or corresponding author from WCSM/WCH

Title	Citations
1. Effectiveness of N95 respirators versus surgical masks in health care	55
2. Telehealth interventions versus center-based cardiac rehabilitation	18
3. Calcium channel blockers versus other classes of drugs for hypertension	18
4. Antiviral treatment for preventing postherpetic neuralgia	15
5. The Asthma Control Test and Asthma Control Questionnaire	15
6. Vitamin A for preventing acute lower respiratory tract infections	15
7. Pharmacotherapy for adults with overweight and obesity	12
8. Therapeutic Outcome of Fluorescence Cystoscopy Guided Resection	12
9. Pyridoxine for Prevention of Hand-Foot Syndrome Caused by Chemotherapy	12
10. Effect of high-flow nasal cannula oxygen therapy in adults with acute hypoxemic respiratory failure	11

Peking Union Medical College Hospital

Founded in 1921 by the Rockefeller Foundation, Peking Union Medical College Hospital (PUMCH) is a Class A tertiary comprehensive hospital committed to delivering state-of-the-art clinical care, innovative scientific research and rigorous medical education. It is designated by the National Health Commission as one of the national guiding centres offering diagnostic and therapeutic care of complex and severe disorders, national demonstration centres for higher medical education and standardised residency training, core national base for clinical research and technological innovation, as well as one of the earliest Chinese hospitals offering medical care to senior state leaders and foreign patients. PUMCH enjoys a high reputation for its full range of disciplines, cutting-edge technologies and outstanding specialties.

Data illustration



Since 2005, **1835** research articles, with any China based author affiliated to PUMCH have been cited in policy and/or clinical guidance documents.



Contributions span key disciplines including oncology, biochemistry, genetics and molecular biology, infectious disease, cardiology and cardiovascular medicine, endocrinology, diabetes and metabolism. Articles are published in leading international journals including Chinese Medical Journal, The Lancet, Intensive Care Medicine and Annals of Oncology, reflecting the hospital's expertise.



Articles have been cited 5,752 times - policy and clinical guideline citations are shown in **Diagram 1**. Top five citing organisations: World Health Organisation (WHO), National Institute for Health and Care Excellence (NICE), Arbeitsgemeinschaft der Wissenschaftlichen Medizinischen Fachgesellschaften (AWMF), Canada's Drug Agency, Leitlinienprogramm Onkologie.



Global impact is illustrated in **Diagram 2**, with citations spread across 78 countries: top 10 countries include the USA, UK, and Germany, demonstrating significant international reach.



Tables 1 and 2 show the top 10 most cited research outputs whereby the first or corresponding author is from PUMCH for both Covid and non-Covid related outputs.

Diagram 1

Health policy and clinical guideline citations, by source

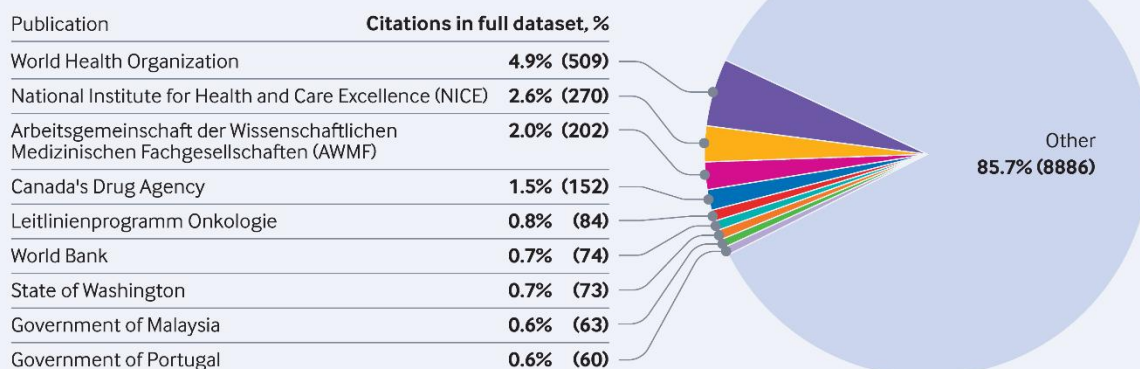
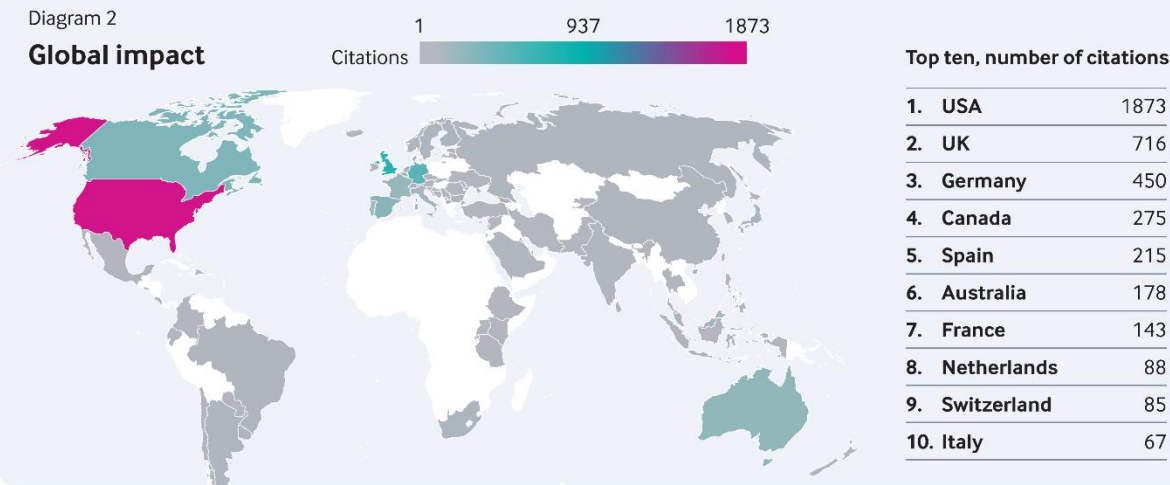


Diagram 2

Global impact



10 most-cited articles

Table 1.
Covid research outputs,
first or corresponding author from PUMCH

Title	Citations
1. Remdesivir in adults with severe COVID-19: a randomise	141
2. A novel coronavirus outbreak of global health concern	46
3. Profiling Early Humoral Response to Diagnose Novel Co	46
4. Critical care crisis and some recommendations during t	30
5. High-Dose Intravenous Immunoglobulin as a Therapeut	26
6. A crucial role of angiotensin converting enzyme 2 (ACE	25
7. The use of anti-inflammatory drugs in the treatment of	16
8. Expert Recommendations for Tracheal Intubation in Cri	12
9. Hypothesis for potential pathogenesis of SARS-CoV-2 ir	12
10. Posttraumatic stress symptoms and attitude toward cri	11

Table 2.
Non-covid research outputs,
first or corresponding author from PUMCH

Title	Citations
1. Macitentan and Morbidity and Mortality in Pulmonary A	32
2. Impact of preoperative nutritional support on clinical oi	28
3. Rapid health transition in China, 1990–2010: findings fr	27
4. Cause-specific mortality for 240 causes in China during	25
5. Discontinuation of Statins in Routine Care Settings	24
6. Fangcang shelter hospitals: a novel concept for responc	22
7. Heat Waves and Morbidity: Current Knowledge and Furt	22
8. Findings of lung ultrasonography of novel corona virus	13
9. Infliximab versus placebo in rheumatoid arthritis patien	12
10. Mycoplasma genitalium in Symptomatic Male Urethritis	12

First Affiliated Hospital of Sun Yat-sen University

Founded in 1910 by an American medical missionary, the First Affiliated Hospital, Sun Yat-sen University (FAH-SYSU) is a top-tier Chinese hospital. It serves as a National Regional Medical Centre with a network of divisions and hospitals.

Data illustration



Since 2005, **1821** research articles, with any China based author affiliated to FAHSU have been cited in policy and/or clinical guidance documents.



Contributions span key disciplines including gastroenterology, oncology, cardiology and cardiovascular medicine, surgery. Articles are published in leading international journals including British Medical Journal (BMJ), Journal of the American Medical Association (JAMA), The Lancet, Lancet Oncology, New England Journal of Medicine, and Gut reflecting the areas of expertise of the hospital.



Articles have been cited **4217** times - policy and clinical guideline citations are shown in **Diagram 1**. Top five citing organisations: the National Institute for Health and Care Excellence (NICE), Arbeitsgemeinschaft der Wissenschaftlichen Medizinischen Fachgesellschaften (AWMF), Leitlinienprogramm Onkologie, World Health Organisation (WHO) and Canada's Drug Agency.



Global impact is illustrated in **Diagram 2**, with citations spread across 61 countries: top 10 countries include the USA, UK, and Germany, demonstrating significant international reach.



Tables 1 and 2 show the top 10 most cited research outputs whereby the first or corresponding author is from FAHSYU for both Covid and non-Covid related outputs.

Diagram 1

Health policy and clinical guideline citations, by source

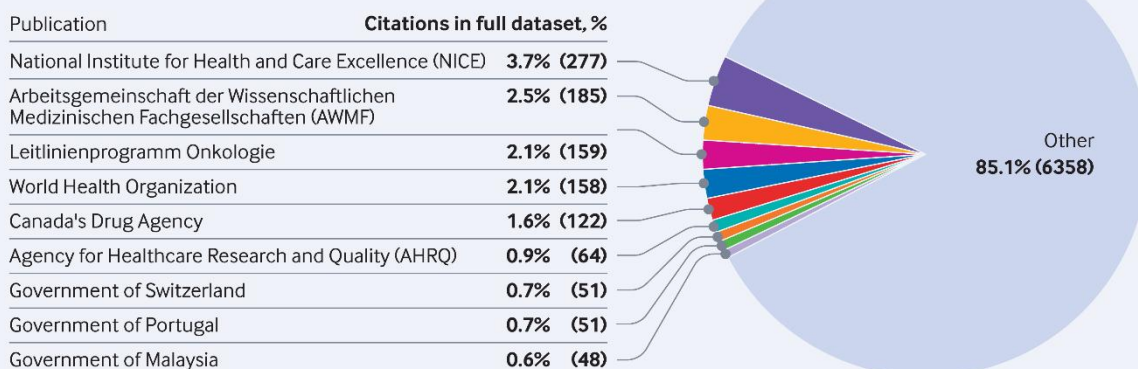
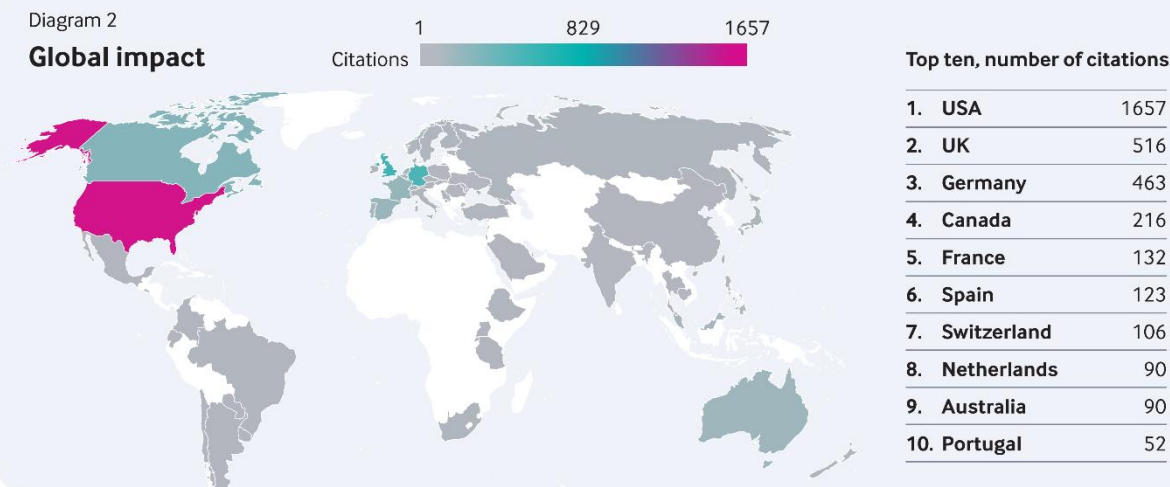


Diagram 2

Global impact



10 most-cited articles

Table 1.

Covid research outputs,

first or corresponding author from FAH-SYSU

Title	Citations
1. Risk Factors Associated With Acute Respiratory Distress	105
2. Expert Recommendations for Tracheal Intubation in Cri	12
3. Use of personal protective equipment against coronavi	12
4. A Randomized, Single-blind, Group sequential, Active-c	12
5. Clinical manifestations and outcome of SARS-CoV-2 inf	11
6. Four doses of the inactivated SARS-CoV-2 vaccine redis	10
7. Robust induction of B cell and T cell responses by a thin	10
8. Implications of COVID-19 for patients with pre-existing	10
9. Manifestations and prognosis of gastrointestinal and liv	9
10. Corticosteroid therapy for coronavirus disease 2019-rel	5

Table 2.

Non-covid research outputs,

first or corresponding author from FAH-SYSU

Title	Citations
1. The role of postoperative colonoscopic surveillance aft	17
2. Randomized Controlled Trial of Cetuximab Plus Chemot	15
3. Aspirin for primary prevention of cardiovascular events	13
4. International Nosocomial Infection Control Consortium	11
5. Intravenous Thrombolysis for Acute Ischemic Stroke in	10
6. The Prevalence and Burden of Primary Headaches in Cr	10
7. Anticoagulation Regimens During Pregnancy in Patient	10
8. Infrasound-induced hemodynamics, ultrastructure, and	10
9. Morbidity and Mortality of Laparoscopic Versus Open D	9
10. Impact of Long-Term Treatment of Methylphenidate on	9

Tongji Hospital Affiliated to Tongji Medical College of Huazhong University of Science and Technology

Tongji Hospital (TJH) was founded in 1900 in Shanghai and moved to Wuhan in 1955. With a complete array of disciplines, a distinguished gathering of experts and an ample force of teachers, and with exquisite medical techniques, state-of-the-art diagnostic and therapeutic equipment, outstanding research capabilities, sophisticated scientific management, it has become a modern comprehensive hospital integrating medical service, teaching, scientific innovation, public health and hospital management, leaping to the front row of China's hospitals. During the 2020 COVID-19 pandemic, the hospital served as a key pioneer, for treating severe cases and earning national honours for its contributions.

Data illustration



Since 2005, **1240** research articles, with any China based author affiliated to Tongji Hospital have been cited in policy and/ or clinical guidance documents.



Contributions span key disciplines including; infectious disease, oncology, radiology, hepatology. Articles are published in leading international journals including; Journal of Medical Virology, Chinese Medical Journal, The Lancet, Oncotarget, The Lancet Oncology, reflecting the areas of expertise of the hospital.



Articles have been cited **4674** times - policy and clinical guideline citations are shown in **Diagram 1**. Top five citing organisations are: the World Health Organisation, National Institute for Health and Care Excellence (NICE), Arbeitsgemeinschaft der Wissenschaftlichen Medizinischen Fachgesellschaften (AWMF), Pan American Health Organisation (PAHO) and Government of Russia.



Global impact is illustrated in **Diagram 2**, with citations spread across 85 countries. Top 10 countries include the USA, UK and Germany.



Tables 1 and 2 show the top 10 most cited research outputs whereby the first or corresponding author is from TH for both Covid and non-Covid related outputs.

Diagram 1

Health policy and clinical guideline citations, by source

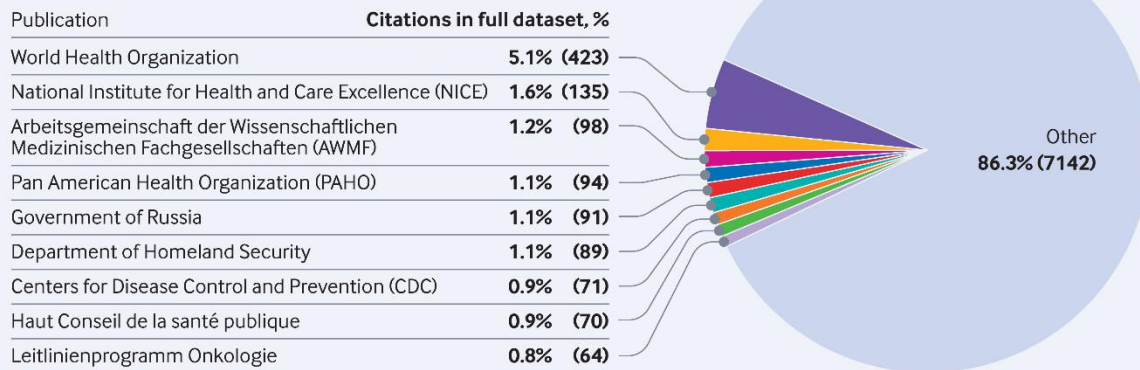
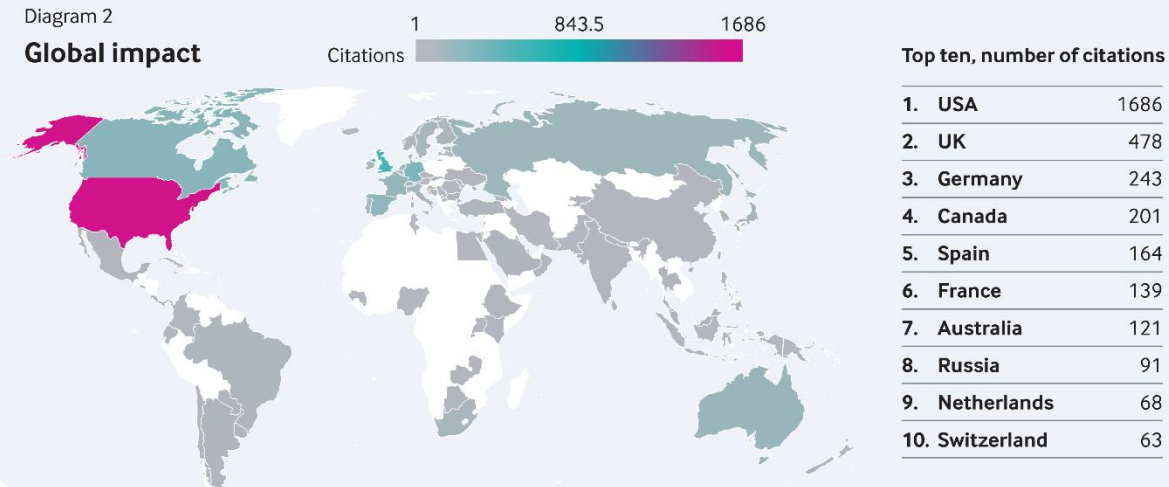


Diagram 2

Global impact



10 most-cited articles

Table 1.
Covid research outputs,
first or corresponding author from Tongji Hospital

Title	Citations
1. Anticoagulant treatment is associated with decreased r	86
2. Correlation of Chest CT and RT-PCR Testing in Coronavi	83
3. Abnormal coagulation parameters are associated with p	73
4. Clinical characteristics of 113 deceased patients with cr	54
5. Clinical predictors of mortality due to COVID-19 based c	54
6. Ruxolitinib in treatment of severe coronavirus disease 2	41
7. Safety, tolerability, and immunogenicity of a recombina	38
8. Clinical characteristics of COVID-19-infected cancer pat	38
9. Profile of RT-PCR for SARS-CoV-2: a preliminary study fr	28
10. A Case Report of Neonatal 2019 Coronavirus Disease in	26

Table 2.
Non-covid research outputs,
first or corresponding author from Tongji Hospital

Title	Citations
1. Protein Diet Restriction Slows Chronic Kidney Disease F	22
2. Effects of Mediterranean-style diet on glycemic control	15
3. Thyroid function, intelligence, and low-moderate fluorid	13
4. Metformin vs Insulin in the Management of Gestational	11
5. Systematic review/Meta-analysis Positron emission tom	10
6. Global, regional, and national dengue burden from 1991	10
7. The effect of statins on renal outcomes in patients with	10
8. Excess Body Mass Index and Risk of Liver Cancer: A Non	9
9. Treatment strategies for women with WHO group II ano	9
10. Chronic rhinosinusitis with and without nasal polyps is c	9

Union Hospital Tongji Medical College Huazhong University of Science and Technology

Founded in 1866, Union Hospital, Tongji Medical College, Huazhong University of Science and Technology is a comprehensive public hospital, one of the first Class-A Tertiary hospitals and one of the top 100 hospitals in China. The hospital is a national leader in a wide range of specialties, including haematology, cardiology, general surgery, urology and anaesthesiology, and has pioneered several advanced technologies. It is a centre of medical education and research, with numerous national-level teaching bases and a strong record of securing national science and technology awards. Committed to public welfare, Union Hospital has won accolades for its poverty alleviation and emergency relief efforts, embodying its mission of "healing the world with love."

Data illustration



Since 2005, **1,160** research articles, with any China based author affiliated to Union Hospital have been cited in policy and/ or clinical guidance documents.



Contributions span key disciplines including; oncology, cardiology and cardiovascular medicine and gastroenterology. Articles are published in leading international journals including; Medicine, Journal of Clinical Oncology, The Lancet Oncology, Journal of Medical Virology, The Lancet Gastroenterology and Hepatology, reflecting the areas of expertise of the hospital.



Articles have been cited **3,260** times - policy and clinical guideline citations are shown in **Diagram 1**. Top five citing organisations; the World Health Organisation (WHO), National Institute for Health and Care Excellence (NICE), Department of Homeland Security, Arbeitsgemeinschaft der Wissenschaftlichen Medizinischen Fachgesellschaften (AWMF), Government of Russia.



Global impact is illustrated in **Diagram 2**, with citations spread across 64 countries; top 10 countries, include the USA, UK and Germany, demonstrating significant international reach.



Tables 1 and 2 show the top 10 most cited research outputs whereby the first or corresponding author is from Union Hospital for both Covid and non-Covid related outputs

Diagram 1

Health policy and clinical guideline citations, by source

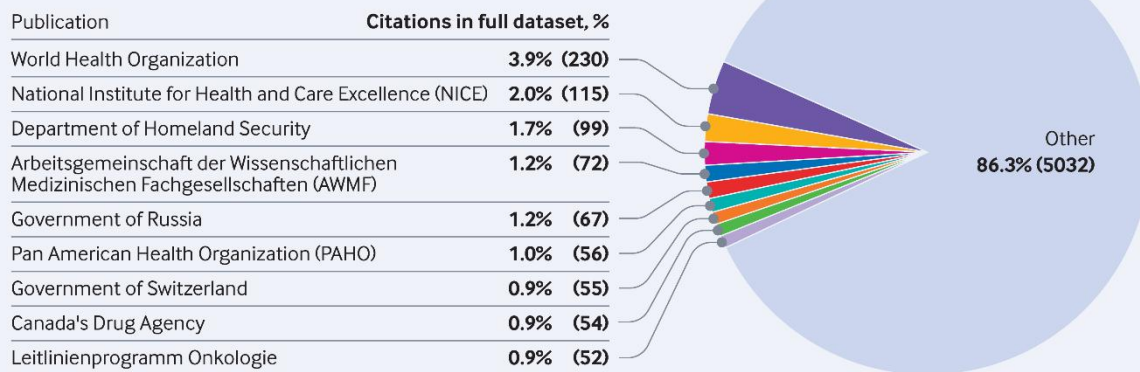
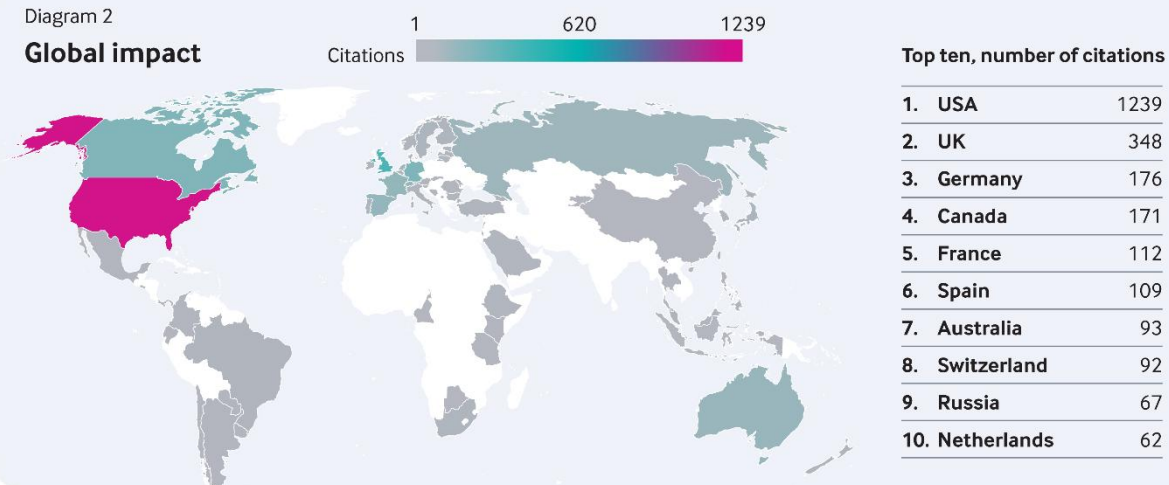


Diagram 2

Global impact



10 most-cited articles

Table 1.

Covid research outputs,

first or corresponding author from Union Hospital

Title	Citations
1. Neurologic Manifestations of Hospitalized Patients With COVID-19	85
2. Time Course of Lung Changes On Chest CT During Recovery From COVID-19	50
3. Radiological findings from 81 patients with COVID-19 pneumonia	40
4. Gender Differences in Patients With COVID-19: Focus on Clinical Features	40
5. The characteristics of household transmission of COVID-19	37
6. Therapeutic and triage strategies for 2019 novel coronavirus pneumonia	25
7. Temporal Changes of CT Findings in 90 Patients with COVID-19	25
8. Renal histopathological analysis of 26 postmortem findings in COVID-19	23
9. Six-month Follow-up Chest CT Findings after Severe COVID-19	21
10. Clinical Characteristics of COVID-19 Patients With Digestive System Involvement	21

Table 2.

Non-covid research outputs,

first or corresponding author from Union Hospital

Title	Citations
1. Clinical analysis of 10 neonates born to mothers with COVID-19	60
2. Whole-Grain, Cereal Fiber, Bran, and Germ Intake and the Risk of Type 2 Diabetes	14
3. The comprehensive summary of surgical versus non-surgical treatment of COVID-19	12
4. Association of sedentary behavior with the risk of breast cancer	10
5. The effect of surgery on the survival status of patients with COVID-19	10
6. Diagnostic Accuracy of Computed Tomography for COVID-19	7
7. miR-146a and miR-196a2 polymorphisms in ovarian cancer	7
8. Co-infection of SARS-CoV-2 and HIV in a patient in Wuhan	6
9. Millimeter-wave exposure promotes the differentiation of human pluripotent stem cells	6
10. Impact of a bundle on prevention and control of health-related behaviors	6

Peking University First Hospital

Peking University First Hospital, founded in 1915, is a large comprehensive tertiary hospital integrating medical services with teaching, research and preventive medicine, and the oldest affiliated medical hospital of Peking University. The hospital has pioneered several key specialties in China, including nephrology, urology, and paediatrics. It has been consistently ranked among the top hospitals in the country and is a designated hospital for high-level government officials. A national leader in both clinical care and research, the hospital has an extensive publication record and is home to numerous national key disciplines.

Data illustration



Since 2005, **994** research articles, with any China based author affiliated to Peking University First Hospital have been cited in policy and/ or clinical guidance documents.



Contributions span key disciplines including; urology, nephrology, cardiology. Articles are published in leading international journals including; Chinese Medical Journal, American Journal of Kidney Disease, Kidney International, The Lancet, BMC Nephrology, JAMA, reflecting the areas of expertise of the hospital..



Articles have been cited **3614** times - policy and clinical guideline citations are shown in **Diagram 1**. Top five citing organisations are World Health Organisation (WHO), National Institute for Health and Care Excellence (NICE), Arbeitsgemeinschaft der Wissenschaftlichen Medizinischen Fachgesellschaften (AWMF), Canada's Drug Agency and Government of Malaysia.



Global impact is illustrated in **Diagram 2**, with citations spread across 81 countries. Top 10 countries include USA, UK and Germany.



Tables 1 and 2 show the top 10 most cited research outputs whereby the first or corresponding author is from PUFH for both Covid and non-Covid related outputs.

Diagram 1

Health policy and clinical guideline citations, by source

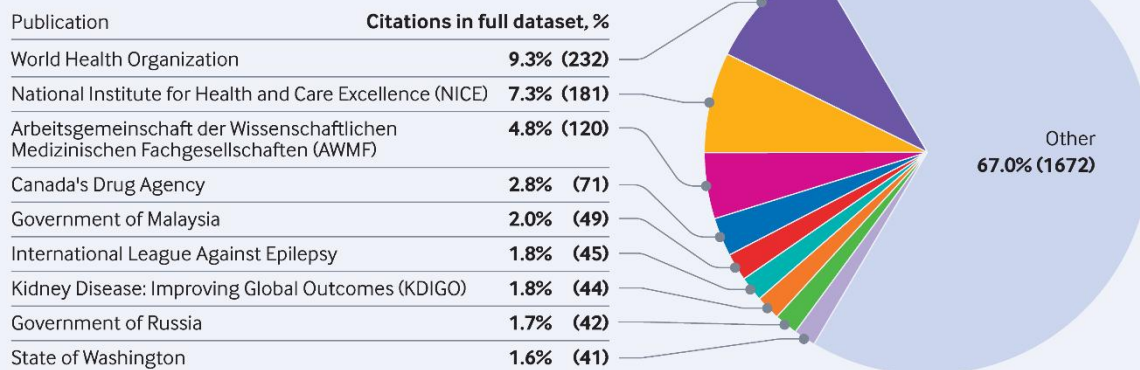
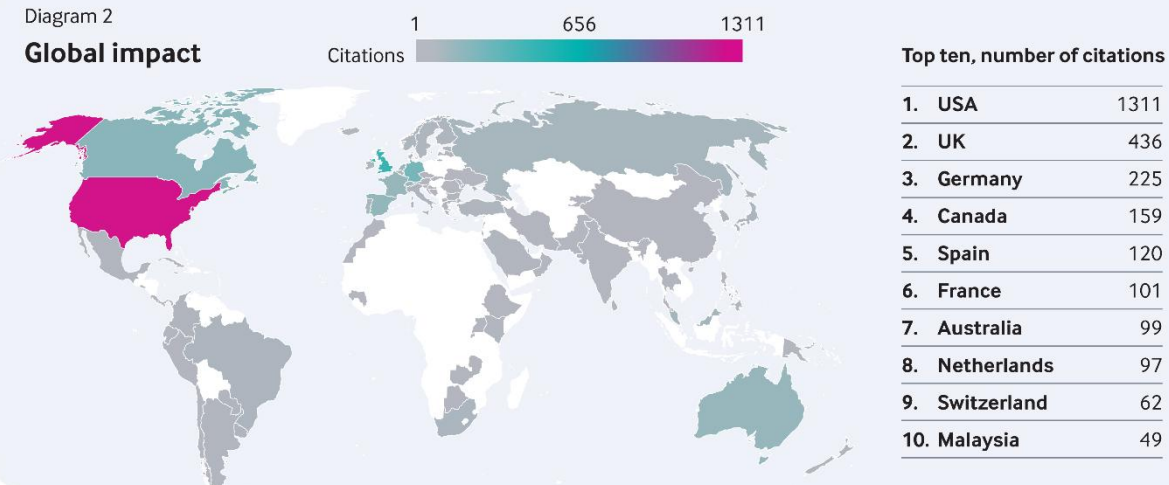


Diagram 2

Global impact



10 most-cited articles

Table 1.

Covid research outputs,

first or corresponding author from PUFH

Title	Citations
1. Clinical characteristics and intrauterine vertical transmi	137
2. Review article: gastrointestinal features in COVID-19 an	22
3. Coronavirus disease 2019 in pregnant women: a report	13
4. Cytokine release syndrome in severe COVID-19: interle	12
5. Effect of coronavirus disease 2019 (COVID-19) on mate	10
6. Expert consensus for managing pregnant women and r	9
7. Consensus of Chinese experts on protection of skin anc	8
8. A systematic review of lopinavir therapy for SARS coron	8
9. Novel coronavirus infection and pregnancy	7
10. Tocilizumab combined with favipiravir in the treatment	5

Table 2.

Non-covid research outputs,

first or corresponding author from PUFH

Title	Citations
1. Effects of intensive blood pressure lowering on cardiov	77
2. Effects of intensive blood pressure lowering on the proj	25
3. Renin-Angiotensin System Inhibitors and Kidney and C	24
4. A Systematic Review and Meta-Analysis of Outcomes of	13
5. Ultrasonography, computed tomography and magnetic	13
6. Cilostazol as an alternative to aspirin after ischaemic str	12
7. A randomized clinical trial of exercise during pregnancy	11
8. Evaluation of the Value of Fasting Plasma Glucose in the	10
9. Effects of Intensive Blood Pressure Lowering on Cardio	9
10. Screening for antibodies againstTreponema pallidumwi	9

Ruijin Hospital

Ruijin Hospital, founded in 1907, is a top-tier Chinese hospital and a designated National Medical Centre. It operates three campuses and boasts a team of highly reputed medical experts, including members of the Chinese Academy of Sciences and Engineering. The hospital runs more than 50 clinical specialties and has a robust research arm, with numerous national key laboratories and research centres. A leader in medical technology, Ruijin Hospital pioneered a proton therapy centre and is a forerunner in digital healthcare.

Data illustration



Since 2005, **937** research articles, with any China based author affiliated to Ruijin Hospital have been cited in policy and/ or clinical guidance documents.



Contributions span key disciplines including hypertension, endocrinology and cancer. Articles are published in leading international journals including; Hypertension, The Journal of Clinical Hypertension, Chinese Medical Journal, The Lancet, New England Journal of Medicine, reflecting the areas of expertise of the hospital.



Articles have been cited **2602** times - policy and clinical guideline citations are shown in **Diagram 1**. Top five citing organisations are; the World Health Organisation (WHO), National Institute for Health and Care Excellence (NICE), Arbeitsgemeinschaft der Wissenschaftlichen Medizinischen Fachgesellschaften (AWMF), Canada's Drug Agency and Pan American Health Organisation (PAHO).



Global impact is illustrated in **Diagram 2**, with citations spread across 81 countries. Top 10 countries include USA, UK and Germany.



Tables 1 and 2 show the top 10 most cited research outputs whereby the first or corresponding author is from RUH for both Covid and non-Covid related outputs.

Diagram 1

Health policy and clinical guideline citations, by source

Publication	Citations in full dataset, %
World Health Organization	9.4% (169)
National Institute for Health and Care Excellence (NICE)	9.4% (169)
Arbeitsgemeinschaft der Wissenschaftlichen Medizinischen Fachgesellschaften (AWMF)	4.0% (71)
Canada's Drug Agency	3.6% (64)
Pan American Health Organization (PAHO)	2.9% (52)
Leitlinienprogramm Onkologie	1.7% (31)
European Society of Cardiology	1.6% (29)
Agency for Healthcare Research and Quality (AHRQ)	1.6% (29)
Government of Spain	1.6% (28)

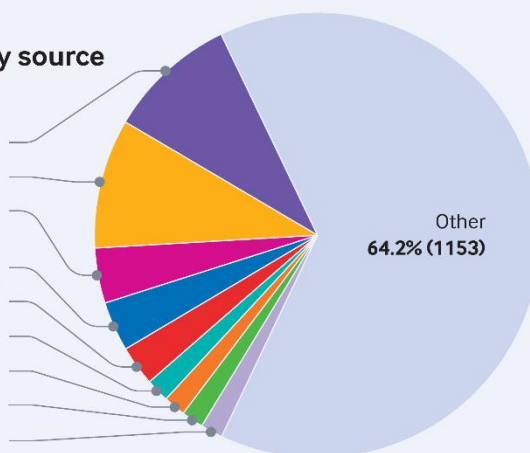


Diagram 2

Global impact



Top ten, number of citations

1.	USA	980
2.	UK	335
3.	Germany	138
4.	Canada	133
5.	France	100
6.	Spain	97
7.	Australia	74
8.	Switzerland	47
9.	Netherlands	46
10.	Finland	33

10 most-cited articles

Table 1.
Covid research outputs,
first or corresponding author from Ruijin Hospital

Title	Citations
1. Hydroxychloroquine in patients with mainly mild to moderate COVID-19: open label, randomised controlled trial	41
2. Effectiveness of convalescent plasma therapy in severe COVID-19 patients: randomised controlled trial	29
3. Estimation of the reproductive number of novel coronavirus (COVID-19) in the early phase of the outbreak in Wuhan, China	20
4. Minimally Invasive Surgery and the Novel Coronavirus COVID-19: A Single Center Experience	20
5. Clinical characteristics and imaging manifestations of 101 patients with COVID-19 in Shanghai, China: a retrospective analysis	16
6. Reduced sensitivity of SARS-CoV-2 Omicron variant to neutralisation by convalescent plasma	16
7. Phase-adjusted estimation of the number of Coronavirus SARS-CoV-2 in China	13
8. Hydroxychloroquine in patients mainly with mild to moderate COVID-19: open label, randomised controlled trial	13
9. Air pollution and temperature are associated with increased COVID-19 mortality: a retrospective analysis	8
10. Effect of ambient air pollutants and meteorological variables on COVID-19 mortality: a retrospective analysis	7

Table 2.
Non-covid research outputs,
first or corresponding author from Ruijin Hospital

Title	Citations
1. Synergistic effects of temperature and humidity on the growth of SARS-CoV-2	11
2. Comparison of intravesical hyaluronic acid instillation and transurethral resection of the prostate in benign prostatic hyperplasia	11
3. Effects of yoga in adults with type 2 diabetes mellitus: A randomised controlled trial	11
4. Effect of Ticagrelor Plus Aspirin, Ticagrelor Alone, or Aspirin Alone on the Risk of Myocardial Infarction in Patients with Acute Coronary Syndrome	9
5. Systolic and Diastolic Blood Pressure Lowering as Determinants of Cardiovascular Risk in Patients with Hypertension	9
6. Economic Impact of Dementia in Developing Countries: A Systematic Review	8
7. Multitarget Therapy for Induction Treatment of Lupus Nephritis	8
8. Robot-assisted laparoscopic versus open middle pancreaticoduodenectomy for pancreatic cancer: A retrospective analysis	7
9. Efficacy and Tolerability of First-Line Cetuximab Plus Leuprorelin in Patients with Metastatic Squamous Cell Carcinoma of the Head and Neck	7
10. Response to Comment on Hong et al. Effects of Metformin on the Progression of COVID-19	7

Sun Yat-sen University Cancer Centre

Established in 1964, Sun Yat-sen University Cancer Centre (SYSUCC) is one of the four earliest tumor hospitals in China and is the largest integrated cancer centre in China for cancer care, education, research and prevention, offering a comprehensive range of health care services for cancer diagnosis and treatment including surgery, radiotherapy, chemotherapy, interventional therapy, immunotherapy, and Traditional Chinese Medicine (TCM). It leads in both clinical practice and research, with a specialised focus on multi-disciplinary care and digital pathology. The centre is a major training hub, having educated over 5,000 oncology professionals and is a top research institution, ranking highly in the Nature Index and publishing in premier medical journals. SYSUCC also has extensive international partnerships, including a long-standing collaboration with MD Anderson Cancer Center. It continues to expand with new campuses to enhance its capacity.

Data illustration



Since 2005, **920** research articles, with any China based author affiliated to SYSUCC have been cited in policy and/ or clinical guidance documents.



Contributions span areas of oncology and articles are published in leading international journals including; Journal of Clinical Oncology, Annals of Oncology, The Lancet Oncology, Journal of Thoracic Oncology, BMC Cancer.



Articles have been cited **1999** times - policy and clinical guideline citations are shown in **Diagram 1**. Top 5 citing organisations are Leitlinienprogramm Onkologie, National Institute for Health and Care Excellence (NICE), Arbeitsgemeinschaft der Wissenschaftlichen Medizinischen Fachgesellschaften (AWMF), American Society of Clinical Oncology, International Agency for Research on Cancer.



Global impact is illustrated in **Diagram 2** with citations spread across 40 countries. Top 10 countries include the USA, Germany and UK.



Tables 1 and 2 show the top 10 most cited research outputs whereby the first or corresponding author is from SYSUCC for both Covid and non-Covid related outputs.

Diagram 1

Health policy and clinical guideline citations, by source

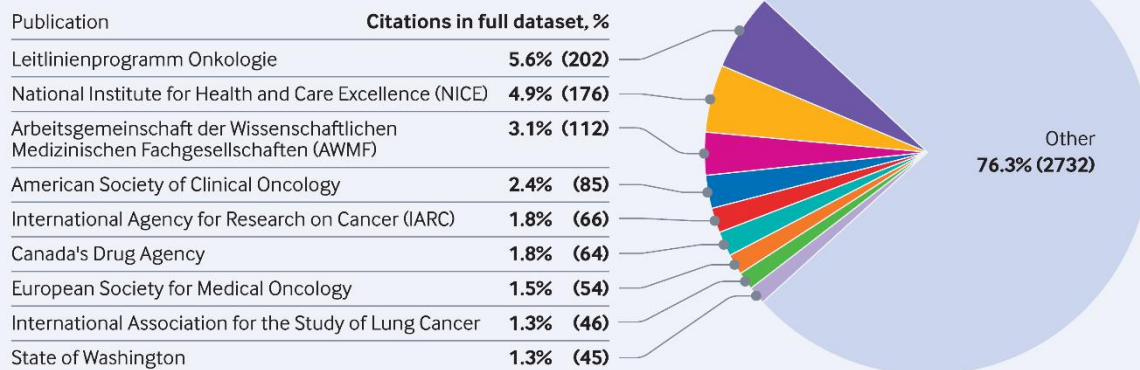
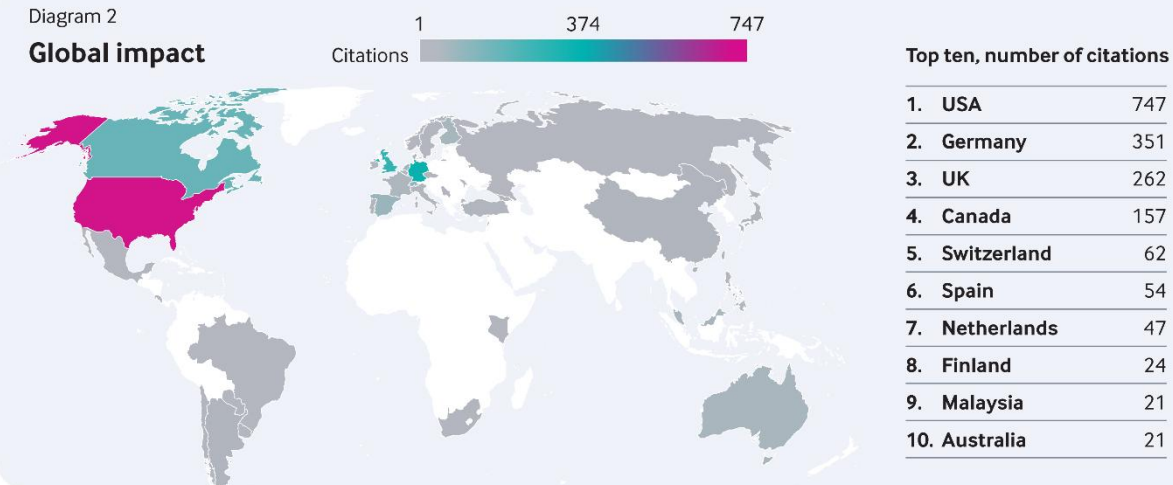


Diagram 2

Global impact



10 most-cited articles

Table 1.
Covid research outputs,
first or corresponding author from SYSUCC

Title	Citations
1. Impact of corticosteroid therapy on outcomes of perso	4
2. Molecular characteristics, immune evasion, and impact	2
3. JAK-inhibitors for coronavirus disease-2019 (COVID-19)	2
4. Experiences of practicing surgical neuro-oncology durir	2
5. Immune checkpoint blocking impact and nomogram p	1
6. Systematic review and meta-analysis of tocilizumab in f	1
7. COVID-19 immune features revealed by a large-scale sil	1
8. Immunological alternation in COVID-19 patients with ci	1
9. Serum interleukin-6 is an indicator for severity in 901 p.	1
10. Epidemiology of mental health problems among patien	1

Table 2.
Non-covid research outputs,
first or corresponding author from SYSUCC

Title	Citations
1. A Prospective Randomized Trial Comparing Percutaneo	28
2. Recurrent Hepatocellular Carcinoma Treated with Sequ	13
3. MGMT in colorectal cancer: a promising component of	12
4. Intensity-modulated radiation therapy for definitive tre	11
5. Aprepitant triple therapy for the prevention of chemotr	10
6. Short term results of neoadjuvant chemoradiotherapy v	10
7. Partial Hepatectomy With Wide Versus Narrow Resectio	10
8. Thoracoscopic Surgery Versus Thoracotomy for Lung C	9
9. Endoscopic Ultrasound for Preoperative Esophageal Sq	9
10. Improved Reverse Screening Algorithm for Treponema	9

Renji Hospital

Founded in 1844, Renji Hospital is a comprehensive, Class A tertiary hospital affiliated with Shanghai Jiao Tong University. It is one of China's oldest Western-style hospitals and operates across multiple campuses. The hospital is a national leader in key specialties like gastroenterology, reproductive medicine, and liver transplantation. Renji Hospital also serves as a major hub for medical research and education, training students and publishing in international journals.

Data illustration



Since 2005, **757** research articles, with any China based author affiliated to Renji Hospital have been cited in policy and/ or clinical guidance documents.



Contributions span key disciplines including; gastroenterology, hepatology and oncology. Articles are published in leading international journals including; Journal of Digestive Diseases, International Journal of Cancer, Gut, Journal of Gastroenterology and Hepatology, New England Journal of Medicine, Lancet Oncology, reflecting the areas of expertise of the hospital.



Articles have been cited **1604** - policy and clinical guideline citations are shown in **Diagram 1**. Top five citing organisations are; the National Institute for Health and Care Excellence (NICE), International agency for Research on Cancer (IARC), Arbeitsgemeinschaft der Wissenschaftlichen Medizinischen Fachgesellschaften (AWMF), Leitlinienprogramm Onkologie and the World Health Organisation (WHO).



Global impact is illustrated in **Diagram 2** with citations spread across 40 countries. Top 10 countries include the USA, UK and Germany.



Tables 1 and 2 show the top 10 most cited research outputs whereby the first or corresponding author is from Renji hospital for both Covid and non-Covid related outputs

Diagram 1

Health policy and clinical guideline citations, by source

Publication	Citations in full dataset, %
National Institute for Health and Care Excellence (NICE)	10.7% (131)
International Agency for Research on Cancer (IARC)	6.4% (78)
Arbeitsgemeinschaft der Wissenschaftlichen Medizinischen Fachgesellschaften (AWMF)	6.0% (73)
Leitlinienprogramm Onkologie	5.6% (68)
World Health Organization	3.0% (37)
Agency for Healthcare Research and Quality (AHRQ)	2.9% (36)
Canada's Drug Agency	2.8% (34)
State of Washington	1.8% (22)
Norwegian Institute of Public Health	1.8% (22)

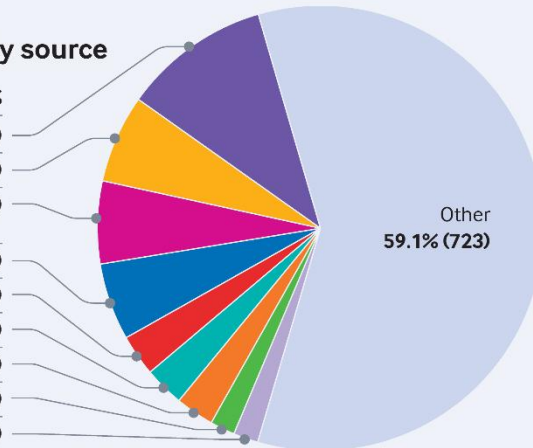
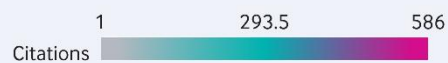


Diagram 2

Global impact



Top ten, number of citations

1.	USA	586
2.	UK	236
3.	Germany	177
4.	Canada	69
5.	Netherlands	50
6.	France	48
7.	Spain	41
8.	Australia	41
9.	Switzerland	29
10.	Norway	23

10 most-cited articles

Table 1.
Covid research outputs,
first or corresponding author from Renji Hospital

Title	Citations
1. 2019 Novel coronavirus infection and gastrointestinal t	8
2. The feasibility, safety, and efficacy of Paxlovid treatment	6
3. Paxlovid in patients who are immunocompromised and	4
4. Younger patients with MAFLD are at increased risk of se	3
5. Efficacy and safety of current therapeutic options for C	3
6. Single cell transcriptome revealed SARS-CoV-2 entry ge	1
7. Safety and Efficacy of Oral administrated Cepharanthin	1
8. Metabolic-associated fatty liver disease is associated wi	1
9. Characteristics, risk factors and outcomes of gastrointe	1
10.	

Table 2.
Non-covid research outputs,
first or corresponding author from Renji Hospital

Title	Citations
1. CA 125, PET alone, PET-CT, CT and MRI in diagnosing re	24
2. Comparison of immunochemical and guaiac-based feci	21
3. Fish consumption and all-cause mortality: a meta-analy	13
4. Postoperative hormone replacement therapy for epithe	9
5. Effect of Probiotics on Inducing Remission and Maintair	9
6. Effect of PFOS on glucocorticoid-induced changes in hu	8
7. Efficacy of Standard Trauma Craniectomy for Refractory	8
8. Recurrence of endometriosis and its control	7
9. Usefulness of 18F-FDG PET, combined FDG-PET/CT anc	6
10. Effect of Long-Term Mild Hypothermia or Short-Term M	6

Fudan University Shanghai Cancer Centre

Fudan University Shanghai Cancer Center (FUSCC), established in 1931 as the earliest specialised cancer institution in China, is a grade-A tertiary hospital engaged in the integration of clinical practice, medical education, oncologic research and cancer prevention. It is a highly respected institution in clinical practice and research, boasting numerous key national disciplines and also a pioneer in cutting-edge treatments, including proton and heavy ion therapy, and has a strong focus on research, with publications in top global journals. FUSCC actively contributes to national health through its extensive network of research and clinical collaborations, both domestically and internationally.

Data illustration



Since 2005, **748 research articles**, with a China based author affiliated to FUSCC have been cited in policy and/ or clinical guidance documents.



Contributions span various aspects of oncology and articles are published in leading international journals including; Journal of Clinical Oncology, The Lancet Oncology, International Journal of Radiation, Oncology Biology Physics, European Journal of Cancer, New England Journal of Medicine, World Journal of Gastroenterology, The Lancet reflecting the expertise of the hospital.



Articles have been cited **1880** times - policy citations are shown in **Diagram 1**. Top five citing organisations are; Leitlinienprogramm Onkologie, National Institute for Health and Care Excellence (NICE), Arbeitsgemeinschaft der Wissenschaftlichen Medizinischen Fachgesellschaften (AWMF), Canada's Drug Agency and State of Washington.



Global impact is illustrated in **Diagram 2**, with citations spread across 32 countries. Top 10 countries include the USA, Germany and the UK.



Tables 1 and 2 show the top 10 most cited research outputs whereby the first or corresponding author is from FUSCC for both Covid and non-Covid related outputs.

Diagram 1

Health policy and clinical guideline citations, by source

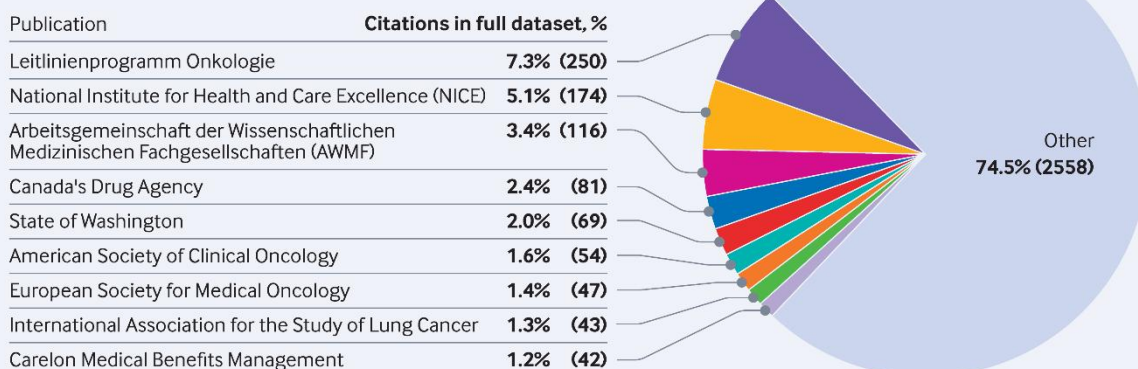
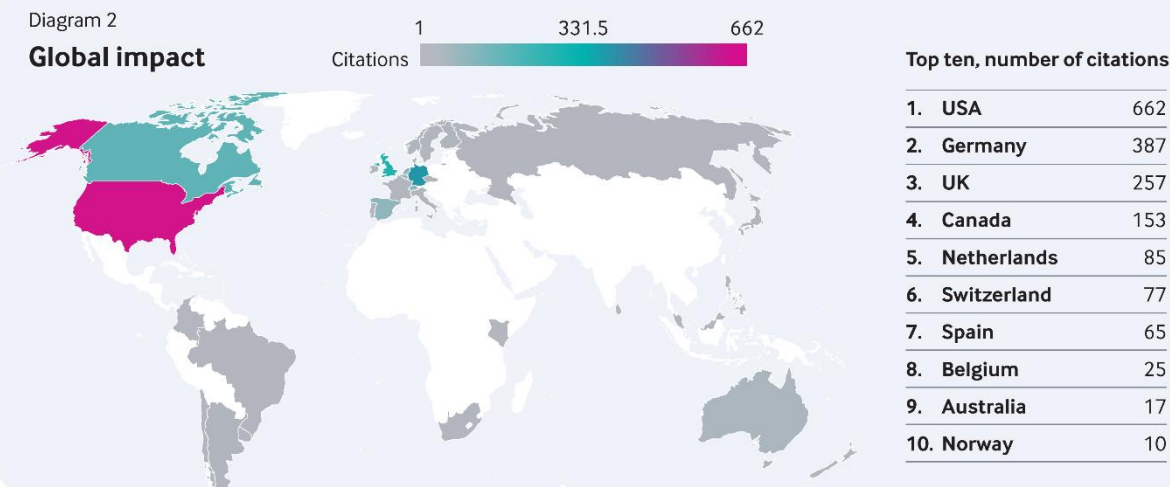


Diagram 2

Global impact



10 most-cited articles

Table 1.
Covid research outputs,
first or corresponding author from FUSCC

Title	Citations
1. Re: Fabio Turco, Andrew Armstrong, Gerhardt Attard, et	1
2. COVID-19-associated gastrointestinal and liver injury: cl	1
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	

Table 2.
Non-covid research outputs,
first or corresponding author from FUSCC

Title	Citations
1. Trastuzumab in the Adjuvant Treatment of HER2-Positiv	20
2. Regorafenib plus best supportive care versus placebo p	16
3. Predictive and prognostic value of KRAS mutations in m	11
4. RET Fusions Define a Unique Molecular and Clinicopath	11
5. Randomized controlled trial of acupuncture for prevent	10
6. Pelvic Floor Electrical Stimulation for Postprostatectom	10
7. A Prospective Randomized Controlled Study on Multipl	10
8. Prognostic factors and treatment comparison in early-s	10
9. Prognostic factors for extra-abdominal and abdominal v	9
10. Postoperative adjuvant radiotherapy improves loco-reg	9

Appendix

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