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HTAsiaLink

NEWSLETTER TO STRENGTHEN COLLABORATION AMONG HTA AGENCIES IN ASIA

How to optimise HTA usage in healthcare crisis ?

Editor's Talk

COVID-19 has been inevitably staying with us for almost a year and a half since the first outbreak. It induces us to seek for more knowledge in order to survive and control this harsh situation, not only from healthcare perspective but also economic and political ones. HTA is a great helping hand for this job, however; there are some elements that need to be adjusted to maximise pandemic control responses. Alongside the role of emergent disease control, HTA also helps China gain appropriate child leukemia medicine since off-label use of pediatric essential medicines were being practiced. To sum up this message, we are grateful to announce that the 9th HTAsiaLink Annual Conference is about to take place in October 11-13. The event is held online and on site in Bogor City, Indonesia.

Best wishes and take extra good care,

The Editorial Team

HTAsiaLink Newsletter Editorial Team

Health Intervention and Technology Assessment Program (HITAP)
6 th Floor, 6 th Building, Department of Health, Ministry of Public Health, Tiwanon Rd., Muang, Nonthaburi 11000, Thailand

Tel: **+662-590-4549, +662-590-4374-5**
Fax: **+662-590-4369**
Email: **comm@hitap.net**

Lead editor: Peeraphol Kanjanakan
Editorial team: Benjarin Santatiwongchai, Apinya Mattadet, Athijade Mongkolsoros, Natthida Malathong
Graphic designer: Buntawun Gerdthongdee

HTAsiaLink is a network to support collaboration among Asian health technology assessment (HTA) agencies. It focuses on facilitating HTA research by accelerating information and resources sharing and developing an efficient methodology for HTA in the region.

Become an HTAsiaLink member

Contact: **HTAsiaLink secretariat (NECA)**
E-mail: **htasialink.sec@yahoo.com**

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Improving the role of health technology assessment in pandemic response

Writer
Professor Mark Jit, BSc PhD MPH

Professor of Vaccine Epidemiology
Department of Infectious Disease Epidemiology,
The London School of Hygiene & Tropical Medicine (LSHTM)

Health technology assessment (HTA) is "the systematic evaluation of properties, effects, and/or impacts of health technologies and interventions ... to inform policy- and decision-making in healthcare, especially on how best to allocate limited funds" [1]. Pandemics like COVID-19 impose severe demands on resources both in and out of the healthcare sector and require difficult decisions to allocate these scarce resources optimally. HTA is, in principle, well-placed to inform such decisions. However, for HTA to be useful and suitable in pandemic responses, practitioners need to adopt approaches that may differ from typical ones used in HTAs of many other technologies.

1 HTA for pandemic responses needs to consider multiple interventions together

The technologies evaluated during pandemics include:

- Medical supplies used in healthcare settings such as resources for acute treatment (including oxygen supplies, ventilators, and antivirals during the COVID-19 pandemic)

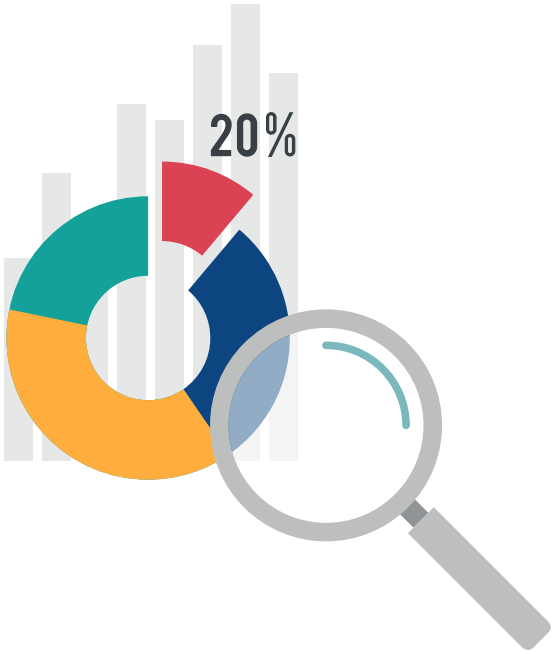
- Non-pharmaceutical interventions like international travel restrictions, school closure, and workplace closure that have consequences far beyond the health sector

- Medical supplies used in population settings such as rapid tests and vaccines.

- Personal protective equipment

- Fiscal interventions such as income support and monetary policy instruments that affect health-related behaviour of populations.

All these technologies need to be evaluated in combination given the synergies, dependencies, and redundancies they have with one another. For instance, the value of vaccination rises when non-pharmaceutical interventions are not being used to control epidemics [2]



2 HTA for pandemic responses needs to draw on a specialist toolkit

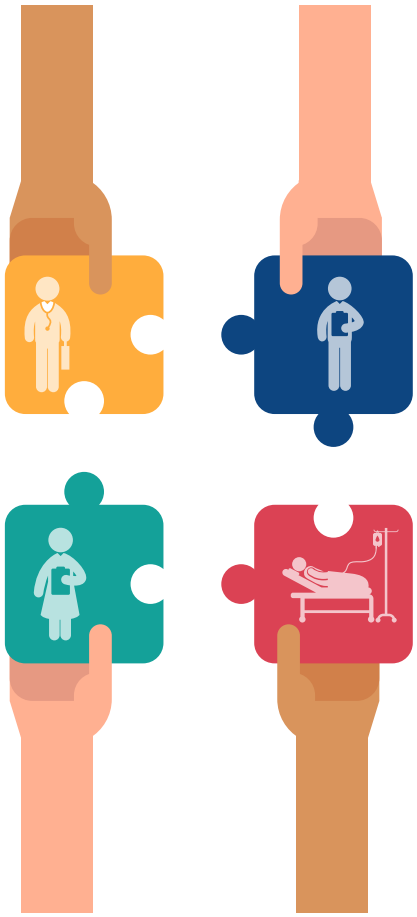
HTA first rose to popularity in as a means to prioritise funding around medical technologies, motivated by the rising cost of introducing new drugs and other healthcare technologies under limited budgets [3]. It has since also become important as a means to establish the composition of an essential health benefits package in countries seeking to achieve universal health coverage [4]. These typical applications of HTA have important differences from pandemic response. Decision-making during a pandemic needs to be informed by a specialist set of tools that see less common use in HTA applications outside of pandemics and situations involving emerging infectious diseases. Examples include the following:

- During a pandemic, predictive modelling about the impact of interventions is needed, and requires expertise in real-time infectious disease modelling [5].
- The economic impact of pandemic responses stretches beyond the healthcare sector and households of patients, and thus is best captured with techniques that are distinct from those used for microeconomic evaluation of therapies for most non-communicable diseases [6].
- The evaluative framework for pandemic interventions may involve trading off goods such as individual liberty and community protection.
- Ethical principles behind resource allocation need to be even more carefully argued and formalised since the consequences of prioritising one group over another for therapeutic or preventive interventions can be immediately apparent [7].

3 HTA for pandemic responses needs to be started before a pandemic

Decisions during a pandemic are made under conditions of time pressure, rapidly changing parameters, information uncertainty, political pressure, and public scrutiny [8]. Consequently, information to inform these decisions needs to be rapidly generated and regularly updated as situations change. HTA processes may typically take weeks or months to conclude – for good reason, since they often require systematic evidence collection and synthesis, complex health and economic modelling, and careful deliberation to reach consensus among multiple stakeholders and experts. However, conducting these processes from start to finish may take too long to inform pandemic decisions in real-time.

To resolve this dilemma, as much as possible of the groundwork for pandemic response HTAs needs to be laid in advance of an actual pandemic. Such groundwork can include establishing surveillance systems, analytical models, ethical frameworks, and protocols for information sharing. HTA committees could also meet in non-pandemic times to reach conclusions about a range of what-if scenarios for potential future pandemics. The need for this kind of information and planning preparedness was recognised following the 2009 influenza pandemic [9]. Preparatory structures need to be flexible enough to be adapted as knowledge about the key features of the pandemic pathogens emerge (such as its likely origin, transmission pathways, rate of transmission, pathogenicity, and susceptibility of key populations).



4 HTA for pandemic responses needs to be interdisciplinary

One of the strengths of HTA is its interdisciplinarity. It brings together perspectives from clinical medicine, epidemiology, economics, ethics, behavioural science, and other disciplines as well as stakeholders from healthcare industry, patient groups, and the public. Such widespread dialogue has helped ensure that HTA conclusions are seen to be evidence-informed, transparent, legitimate, and fair.

This interdisciplinarity is also an asset for provision of technical advice for pandemic preparedness. For example, the technical advice provided to decision-makers for COVID-19 preparedness is often split into completely separate analyses such as epidemiological modelling, macroeconomic modelling, and behavioural analyses. This may obscure difficult trade-offs that decision-makers make among population health, employment, long-term fiscal sustainability, and equity. Being able to integrate these analyses to elucidate the consequences of decision-makers' preferences across multiple competing objectives can add transparency and legitimacy to these difficult decisions.

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Member update:
The HTA study for child leukemia medicine

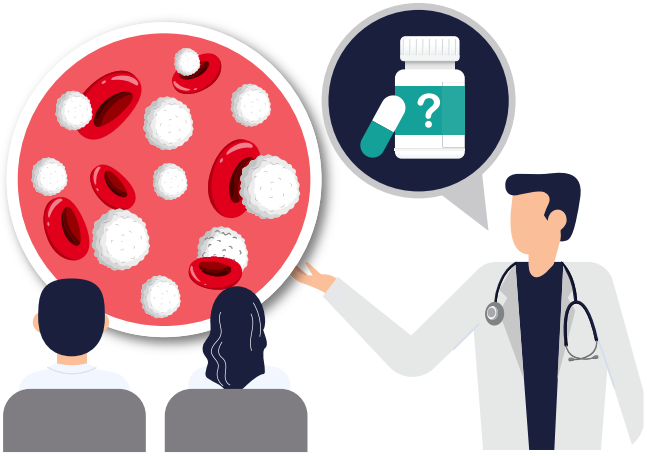
A pilot study for developing the guideline
for assessing the essential medicines in China

Writer
Yue Xiao, PhD

Research Fellow, Program Leader of Medical Technology Assessment
China National Health Development Research Center
(China Center for Medicine and Health Technology Assessment)

Writer
Lulu Jia, PhD

Associate Researcher
Beijing Children's Hospital, Capital Medical University



HTA study of child leukemia medicine was selected as a pilot study of developing the guideline for assessing the essential medicines by the national HTA agency, NCMHTA, and its partner institutions

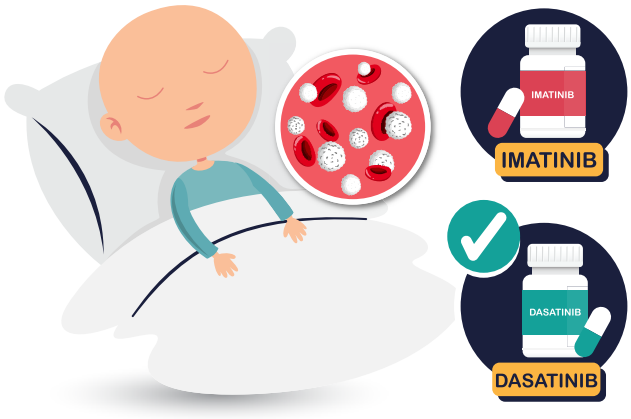
Researchers conducted literature research, real world study (RWS), and model-based economic evaluation to compare the safety, effectiveness, and cost-effectiveness of dasatinib and imatinib

As a huge country on its track to achieve universal health coverage (UHC), China has taken HTA as a main tool for supporting health policymaking. To systematically supply evidence for informing the health reforms, the National Health Commission has established the national HTA agency, the National Center for Medicine and Health Technology Assessment (NCMHTA) in 2018, as an affiliated part of government think-tank—the China National Health Development Research Center (CNHDRC). NCMHTA has been developing guidelines for assessing medicines in national essential medicine list or the potential candidates for the listing decision, including one of leukemia medicine for children.

There are some obstacles in providing treatment to children with acute or chronic leukemia in China. The patients have often been treated with complex regimen for a relatively long course, while labelling mistakes have caused off-label use of essential medicines for children, which is considered a key issue with the child medicine supply and utilisation. It has caused safety issues and alarmed the national policymakers. Based on a scoping study, an HTA study of dasatinib for treating children with Philadelphia chromosome-positive acute lymphocytic leukemia (Ph+ALL) was selected and conducted by NCMHTA and its partner institution, the Beijing Children's Hospital (BCH).

Several research methods involved in this study. The teams conducted literature research, real world study (RWS), and model-based economic evaluation based on the assessment guidelines in 2019. A multi-disciplined clinical evaluation taskforce in BCH was established to help conduct RWS, which was designed and implemented with the help of the clinicians and clinical pharmacists. The model-based cost-effectiveness analysis (CEA) with parameters from the real clinical setting was conducted by NCMHTA.

After 8 months' study, the joint HTA taskforce produced the findings of safety, effectiveness, and cost-effectiveness analysis. Compared with imatinib (the comparator medicine), the secondary data showed that dasatinib could improve the overall survival rate, prolong the asymptomatic survival period, and reduce the cumulative recurrence rate. RWS findings showed that dasatinib was significantly better than imatinib in terms of BCR/ABL gene quantitative, minimal residual disease (MRD), and bone marrow remission rate. CEA results showed that for 10 years of treatment, the incremental cost-effectiveness ratio (ICER) of dasatinib over imatinib was 9,823.10 USD/QALY (1 USD = 6.9318 RMB), lower than 1x per capita GDP in China (10,227 USD in 2019).



The study concluded that dasatinib is superior to imatinib in terms of effectiveness and cost-effectiveness, with no significant difference in terms of safety

HTA is accepted for a process of developing medicine evaluation guideline in China and a multi-centred study is being designed with the support of NCMHTA and BCH, to gain more evidence and test out more sophisticated RWS design

As a result, the study concluded that dasatinib is superior to imatinib in terms of effectiveness and cost-effectiveness, with no significant difference in terms of safety. Given that domestically produced generic of dasatinib is coming to the market soon, further cost-effectiveness analysis is called for to formulate proper policy recommendations regarding the drug inclusion in the national public health insurance program.

The findings were presented to clinical experts and policymakers in May 2020 for consultation of possible policy translation. Based on requirement of the national policymakers, the HTA will be rolled out as a multi-centred study with participation of over five pediatric medical centres across the nation, to gain rich evidence for policy formation and implementation and explore RWS methodology.

Reflections on the study

As a pilot study of the HTA guideline application, the HTA of child leukemia medicine achieved its initial goal—to test the practical use of the HTA guidelines and build up capacity of the Chinese clinicians and pharmacists in conducting HTA. More importantly, the study produced meaningful evidence urgently demanded for supporting medicine label changing and listing decision of the national policymakers.

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Member and partner activities

The first hybrid HTAsiaLink Annual Conference

With the theme “Global Health Technology Assessment (HTA) Practices in Asia: Bridging True Evidence to the UHC Benefits Adjustment”, the 9th HTAsiaLink Annual Conference takes place on October 11-13, 2021, in Bogor City, Indonesia, and via online platform.

Find more information through this link
https://htasialink2021.com/

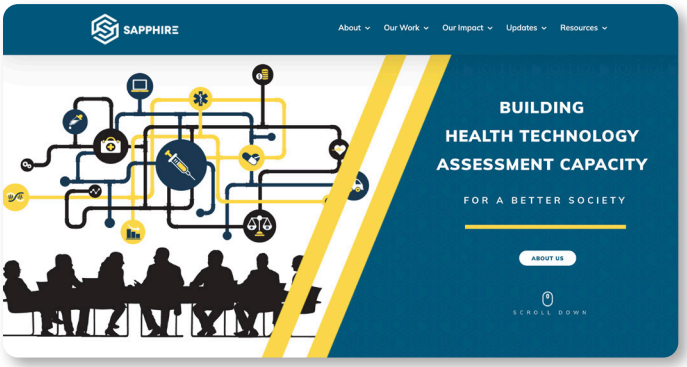
Global HTA event

World Evidence-Based Healthcare (EBHC) Day is held on October 20 each year. It is a global initiative that raises awareness of the need for better evidence to inform healthcare policy, practice and decision making in order to improve health outcomes globally.

Find more information through this link
https://worldebhcday.org/

Member and partner activities

New website



Strengthening Active Partnerships for Policy and Health Intervention Research and Evaluation (SAPPHIRE) consortium assembles the high-quality research projects of internationally renowned experts in multidisciplinary fields related to HTA.

Find more information through this link
https://thesapphire.health/

International COVID-19 project

COVID-19 Research and Decision Support Initiative in Asia (CORESIA) project aims to regionally study on vaccination certificate used in each country, with the supports from the advisory group and the working group around the globe.

Find more information through this link
http://vaxcert.info/

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NICE — The National Institute for Health and Care Excellence (NICE)

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Shanghai Health Technology Assessment Research Center, Shanghai Health Development Research Center

Vietnam

Health Strategy and Policy Institute (HSPI)

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Department of Health Convergence, Ewha Womans University

Taiwan

Division of Health Technology Assessment, Center for Drug Evaluation (CDE)

Big Data Research Center, Fu Jen Catholic University

National Hepatitis C Program (NHCP) Office, Ministry of Health and Welfare

Japan

C2H CORE2 HEALTH — Center for Outcomes Research and Economic Evaluation for Health (C2H), National Institute of Public Health

HIAS Health — HIAS Health, Research Center for Health Policy and Economics, Hitotsubashi Institute for Advanced Study (HIAS), Hitotsubashi University

South Africa

SAMRC/WITS Centre for Health Economics & Decision Science PRICELESS SA — Priority Cost Effective Lessons for System Strengthening (PRICELESS), Wits School of Public Health

Bhutan

Essential Medicines and Technology Division (EMTD), Department of Medical Services, Ministry of Health, Bhutan

Sri Lanka

Health System Research Unit, Department of Community Medicine, Faculty of Medicine, University of Colombo

Philippines

HTA-CPG Unit, Health Policy Development and Planning Bureau, Department of Health

National Center for Pharmaceutical Access and Management Department of Health (NCPAM)

Indonesia

CHEPS — Center for Health Economics and Policy Studies (CHEPS), Universitas Indonesia

InaHTAC — InaHTAC (Indonesia Health Technology Assessment Committee), Ministry of Health, Republic of Indonesia

India

Department of Health Research (DHR), Ministry of Health and Family Welfare, Government of India

Institute of Public Health Kalyani (IPHK)

Centre for Health Policy, Planning and Management (CHPPM), Tata Institute of Social Sciences (TISS)

School of Medicine and Public Health, University of Wisconsin-Madison — The Department of Community Medicine and School of Public Health, Post Graduate Institute of Medical Education and Research, Chandigarh

Thailand

Mahidol University — Health Technology Assessment Program, Mahidol University

HITAP — Health Intervention and Technology Assessment Program (HITAP)

IHPP Thailand — International Health Policy Program (IHPP)

Malaysia

MaHTAS — Malaysia Health Technology Assessment Section (MaHTAS), Ministry of Health Malaysia

Ministry of Health Malaysia — Pharmaceutical Services Program, Ministry of Health, Malaysia

USM — School of Pharmaceutical Sciences, Universiti Sains Malaysia (USM)

Australia

COAG Health Council — Health Technology Reference Group (HTRG)

menzies — Menzies School of Public, University of Sydney

The George Institute for Global Health

Royal Australasian College of Surgeons — The Australian Safety and Efficacy Register of New Interventional Procedures – Surgical (ASERNIP-S)

Singapore

Changi General Hospital, SingHealth — Health Services Research Unit, Changi General Hospital, Singapore Health Services (SingHealth)

Duke-NUS Medical School — Health Services Research Institute (HSRI), Duke-NUS Medical School

NUS Saw Swee Hock School of Public Health

Ministry of Health, Singapore

HTA calendar

July - December 2021

ADPM 613 Health Economics courses

- **Event date:** July 5-12, 2021
- **Place:** Online
- **Organiser:** Health Intervention and Technology Assessment Program (HITAP)

See more: https://docs.google.com/forms/d/e/1FAIpQLSfIDjcWCN9mw53nNrriWLIjTEtmU9g4Ia7pYv3G01Alup4Lxg/viewform

Seminar: A government economist perspective: What has been the impact of doing drugs for 20 years

- **Event date:** July 8, 2021
- **Place:** Online
- **Organiser:** Centre for Health Economics (CHE), University of York

See more: https://www.york.ac.uk/che/seminars/che/2021-seminars/danny-palnoch/

Workshop: Introduction to Qualitative Methods

- **Event date:** July 26-27, 2021
- **Place:** Online
- **Organiser:** Saw Swee Hock School of Public Health, National University of Singapore (NUS)

See more: https://hiper.nus.edu.sg/course-iqm/

INAHTA 2021 Congress

- **Event date:** September 16-21, 2021
- **Place:** Online
- **Organiser:** The International Network of Agencies for Health Technology Assessment (INAHTA)

See more: https://www.inahta.org/2021/03/inahta-2021-virtual-congress-dates-16-21-september/

Virtual ISPOR Latin America Summit 2021

- **Event date:** September 30 - October 1, 2021
- **Place:** Online
- **Organiser:** International Society for Pharmacoeconomics and Outcomes Research (ISPOR)

See more:https://www.ispor.org/conferences-education/conferences/upcoming-conferences/ispor-latin-america-summit-2021/

The 9th HTAsiaLink Hybrid Annual Conference

- **Event date:** October 11-13, 2021
- **Place:** Online and Bogor City, Indonesia
- **Organiser:** Center for Health Economics and Policy Studies (CHEPS), Ministry of Health Republic of Indonesia

See more: https://htasialink2021.com/