

International Comparisons of Health Technology Assessment and Reimbursement Outcomes for Oncology Drugs with Regulatory Review through Project Orbis

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Objectives

- Project Orbis is an international regulatory collaboration led by the US Food and Drug Administration (FDA) Oncology Center of Excellence
- The program enables concurrent regulatory review of oncology products, with aim to give patients faster access to promising cancer treatments
- We examined health technology assessment (HTA) and public reimbursement outcomes for Project Orbis drug-indications reviewed in Canada and other jurisdictions globally

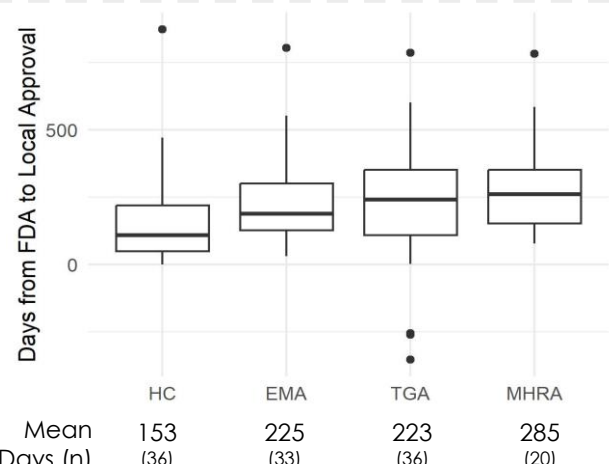
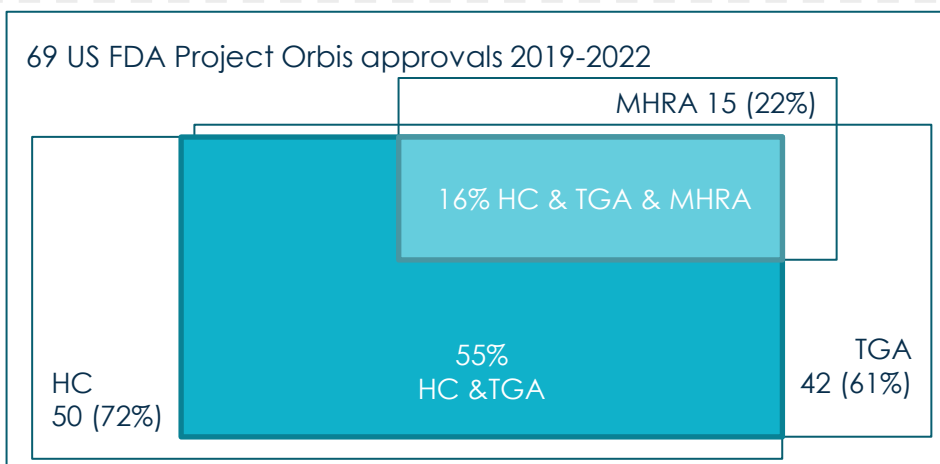
Methods

- We identified and assessed concordance in regulatory approvals for Project Orbis drugs approved by Project partners: Canada, Australia, (and UK) from program inception in 2019 to end of 2022
- For drug-indications with an HTA submission in Canada, we collected all related HTA recommendations and reimbursement outcomes for the three countries plus France, Germany up to March 2023, classifying all non-negative reimbursement recommendations as positive, listed in at least one Canadian province as funded
- We determined concordance in HTA submissions, recommendation statuses, recommendation outcomes, and in public funding status across jurisdictions
- We assessed time from FDA approval to regulatory approvals and completed HTA dates in each jurisdiction

Limitations

- Reliance on publicly available data, with some limitations (e.g., UK funding assumed 90 days from HTA conclusion for funding comparison)
- Limited scope (regulatory approval with CADTH submission); full Project scope could differ
- Early access at or ahead of market approval in Germany and France preclude time-to-listing assessment similar to other jurisdictions; subsequent market changes not captured

Regulatory Approvals



- Most US FDA approvals through Project Orbis in 2019-22 were also approved by Canada or Australia
- Participation by partners on each approval differed, resulting in variation in time to approval and lower international consistency

Note: UK joined Project Orbis in 2021

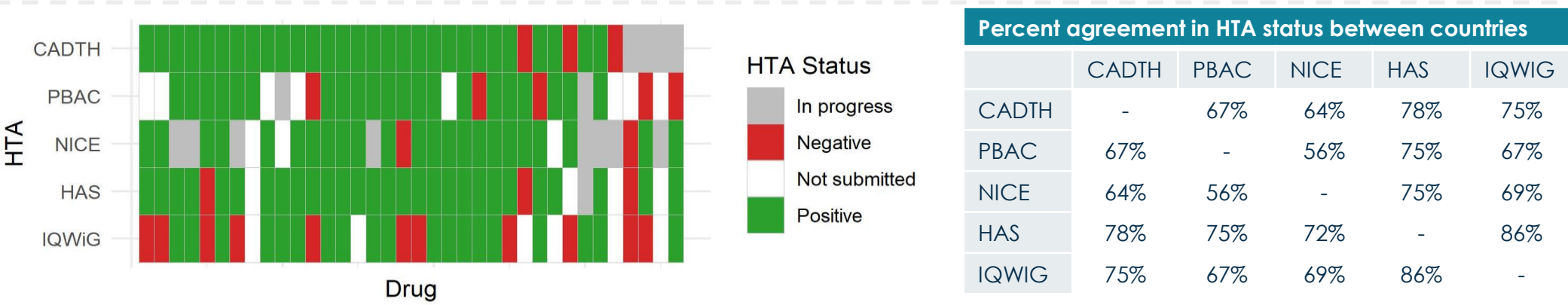
Jurisdictional Details and Differences

	Canada	Australia	United Kingdom	France	Germany
Project Orbis Partner	Yes	Yes	Yes (Jan/21)	No	No
Regulatory Agency	HC: Health Canada	TGA: Therapeutic Goods Administration	MHRA: Medicines and Healthcare products Regulatory Agency (Feb/20)	EMA: European Medicines Agency	EMA: European Medicines Agency
HTA Agency	CADTH	PBAC	NICE	HAS	IQWiG
Specific system, policy or legislative considerations for funding	CADTH has no access to net prices, does not participate in reimbursement/ pricing (confidential) negotiations that mostly occur after HTA completion. There is no formal pathway to accelerate negotiation, and pre-regulatory HTA submission is permitted but only 39% of Project Orbis drugs leveraged this. 14 different provinces/ territories have autonomy in when to fund the drug following successful joint negotiation (often significantly different between first and last to fund).	PBAC can render “not recommended” decision based on cost-effectiveness, but if there is clinical merit can ask for risk-sharing arrangement that includes confidential pricing terms for resubmission. A price offer package must be submitted by manufacturer within 6 months of positive PBAC recommendation and federal Department of Health can further negotiate to execute reimbursement agreement.	When NICE recommends a treatment ‘as an option’, NHS England must make it available within 3 months (unless otherwise specified) of its date of publication. There are various mechanisms to facilitate access (e.g., Accelerated Access Review). NICE can take into account confidential prices in its evaluation, and negotiations can occur during HTA review. Cancer Drug Fund allows for Managed Entry with RWE collection, with a category cap in place.	There is an early access pathway (autorisation temporaire d’utilisation, ATU), which was granted for many Project Orbis drug-indications; price negotiations and final reimbursement decision can occur after initial funding. Economic evaluation is conducted separate from HTA clinical evaluation only for drugs likely to have a significant budget impact and is taken into consideration for confidential pricing negotiation by the federal Ministry.	Funded at market entry prior to HTA evaluation and price negotiation/ adjustments. Drugs are reimbursed by default in Germany: companies may launch with reimbursement and at a price of their choosing as soon as they receive marketing authorization. Unfavourable IQWiG/G-BA outcome or low expected negotiated reimbursement price (which becomes publicly available) could lead to market withdrawal.

CADTH: Canadian Agency for Drugs and Technologies in Health; PBAC: Pharmaceutical Benefits Advisory Committee; NICE: National Institute of Health and Care Excellence; HAS: Haute Autorité de santé, IQWiG: Institut für Qualität und Wirtschaftlichkeit im Gesundheitswesen (Institute for Quality and Efficiency in Healthcare)

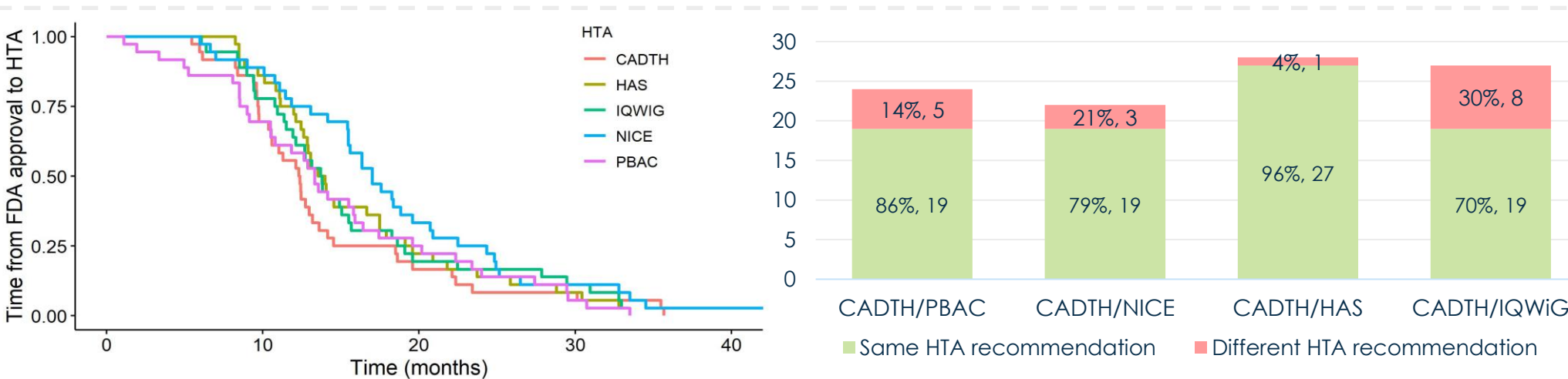
HTA Outcomes

Among Project Orbis drug-indications with Canadian and Australian regulatory approvals, 36 have been submitted to CADTH



Similarity in HTA status: HTA status (completed, in progress or not submitted), varies across drug-indications between countries, resulting in moderate concordance in current HTA status overall

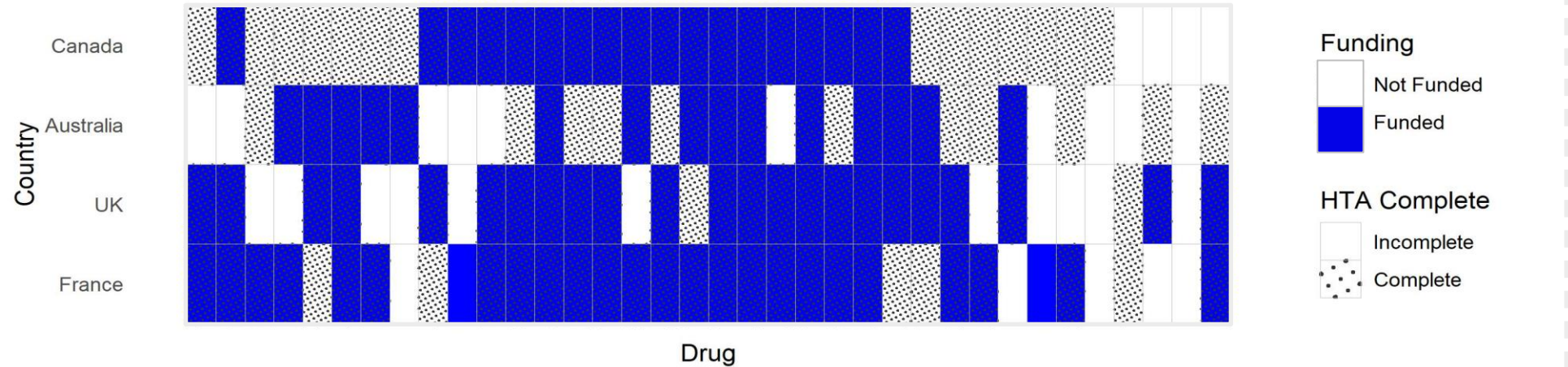
- More similarity between CADTH and EU than with NICE or PBAC



Similarity in HTA recommendations: Among reviews with final recommendations issued, majority (~80%) of drug-indications have concordant outcomes (mainly positive) across HTA

- Time from FDA to HTA recommendation similar across jurisdictions
- Drug-indications submitted to multiple HTA agencies likely to consistently receive positive recommendation

Funding



	Canada	Australia	UK	France
Canada	-	53%	69%	67%
Australia	53%	-	50%	42%
UK	69%	50%	-	58%
France	67%	42%	58%	-
Completed HTA	32	26	25	29
% Funded	56%	58%	92%	83%

- Wide variation (22% overall agreement) in funding across countries for included drug-indications
- Most similarity between Canada and UK, France in funding status
- Among drug-indications with completed HTA, much lower proportion funded in Canada and Australia

Conclusions

- High variability in market access routes and timelines for drug-indications approved through Project Orbis internationally
- Many factors affect reimbursement decisions and timelines to patient access, including differences in systems, policies, and processes (regulatory, HTA, pricing negotiations) among jurisdictions, which contribute to differences in access
- Challenging to fully capture and attribute benefits of collaborative regulatory review; timelines depend on starting point