What are the reasons for receiving a negative decision from NICE? - A 5-year review (2019-2023) of NICE decisions

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Background

- > After-market authorization, receiving positive recommendations from the Health Technology Assessment (HTA) bodies is necessary for achieving new drugs.
- More than 40% of the new drugs approved by European Medicines Ager are not recommended by National Institute for Health and Care Excellen
- >Understanding the factors influencing NICE's decisions is crucial for ens access to innovative and effective treatments.

Objectives

> To understand the reasons for negative reimbursement decision, we undertook a review of NICE decisions.

Methods

> Hand searching of NICE website was undertaken to retrieve the HTA submissions receiving negative recommendations in the last 5 years (2019-2023)

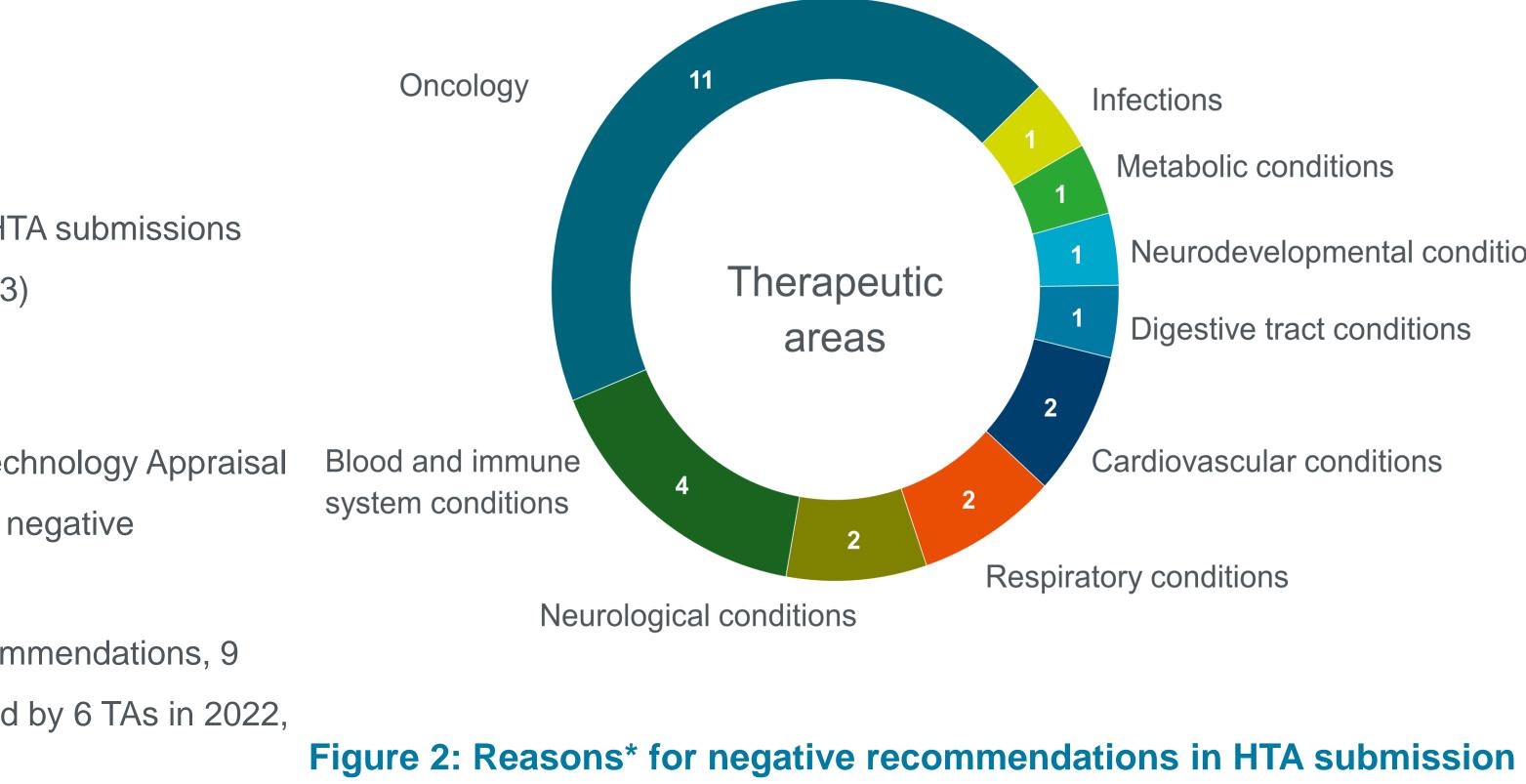
Results

- > Search identified a total of 25 technology appraisals [24 Single Technology Appraisal (STA) and 1 Highly Specialized Technologies (HST)] that received negative recommendations from NICE
- > In the last 5 years, among the 25 TAs that received negative recommendations, 9 TAs received negative recommendations in the year 2023, followed by 6 TAs in 2022, 5 TAs in 2021, 4 TAs in 2019 and 1 TA in 2020 (Table 1)
- > Majority of the non-recommendations were in oncology (44%) followed by blood and immune system conditions (16%), 8% each in cardiovascular, respi neurological conditions and 4% each in infections, metabolic, neuro and digestive tract conditions (Figure 1)
- > There were multiple reasons for receiving a negative decision from One of the most common reason of rejection was uncertain and high effectiveness estimates (more than NICE thresholds) reported in al addition, other reasons of rejections were
 - Uncertain long-term benefits/efficacy measure
 - Absence of direct comparison with relevant comparators
 - Lack of meaningful improvement in health-related quality-of-l
 - Inadequate sample size
 - Unclear method used for indirect comparisons (ITC)
 - > Trial results not being generalizable to the National Health Service (NHS)
 - Failure to meet NICE's criteria for consideration as a life-extending treatment at the end of life

1: Parexel International, Mohali, India; 2: Parexel International, Basel, Switzerland; 3: Parexel International, Bengaluru, India

	Table 1: Negative recommendations from NICE in last 5 years		
ne respective	Year	Total number of TAs	Negative recommendations
g access to	2019	51	4 (7.8%)
	2020	50	1 (2%)
ency (EMA)	2021	92	5 (5.4%)
nce (NICE).	2022	102	6 (5.9%)
nsuring	2023	97	9 (9.3%)
	Total	392	25 (6.4%)

Figure 1: HTA submission receiving non-recommendations across all therapeutic areas



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all the 25 HTAs. In	Uncertain long-term benet
ons for	Uncertain long-term benefits
-life assessments	Lack of direct comparisons +
	Lack of direct comparisons + Unclear meth sample size

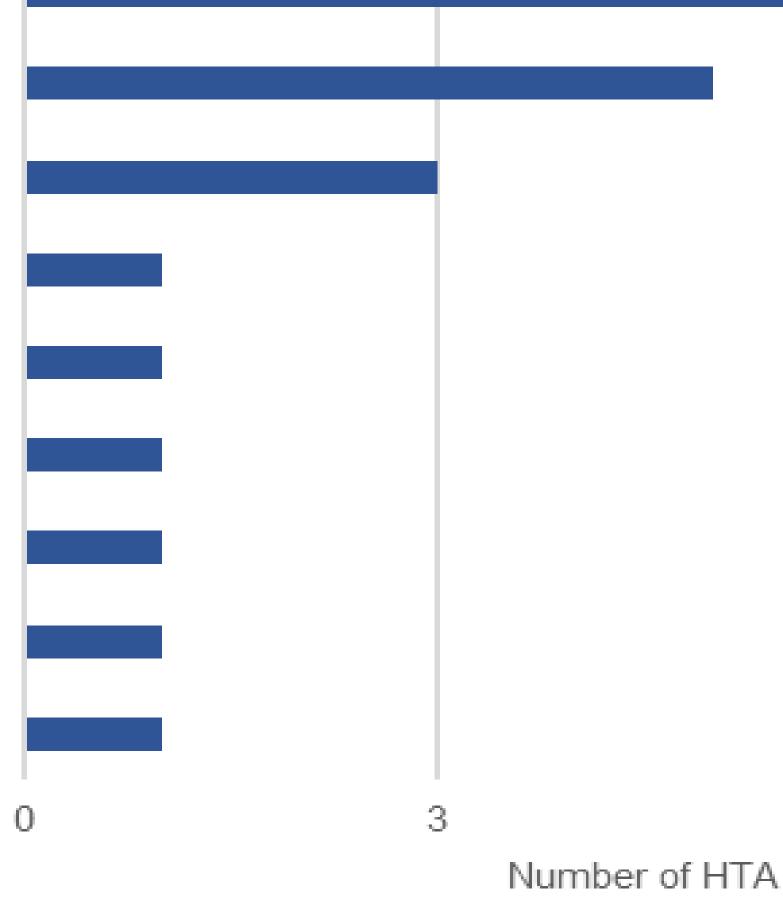
*All the reasons were in addition to uncertain and higher cost-effectiveness estimates than what NICE normally considers an acceptable use of NHS

- **Metabolic conditions**
- Neurodevelopmental conditions
- Digestive tract conditions
- Cardiovascular conditions

Conclusions

- decision not to recommend certain drugs or health technologies.
- is crucial for understanding the rationale behind NICE's negative recommendations.
- existing treatments, and overall cost. If the ICER exceeds the threshold set by NICE, it is likely to impact the decision-making process and result in a negative recommendation.
- of tailoring recommendations accordingly.
- outcomes, and guiding future research and development efforts.

Uncertain long-term benefits Lack of direct comparisons ement in HRQoL assessments teria + Inadequate sample size not being generalizable to NHS efits + Inadequate sample size ts + Lack of direct comparisons + Unclear method used for ITC thod used for ITC + Inadequate



Reference <u>https://www.nice.org.uk/</u>





> This research highlighted that uncertain long term-benefit is usually the result of an unfavourable Incremental Cost-Effectiveness Ratio (ICER) analysis. This was the main reason for NICE's

> Furthermore, the analysis highlights the role of additional reasons in influencing NICE's decisionmaking process. Factors such as the lack of direct comparisons was the second most cited reason for unfavourable assessment. Considering these additional reasons alongside the ICER threshold

> The threshold for the ICER varies depending on several key factors, including the indication, medical need, and other considerations listed in the conclusion above. NICE evaluates the costeffectiveness of interventions by considering their long-term efficacy, direct comparisons to

> By including the ICER as a prominent determining factor, NICE ensures that healthcare resources are used in a cost-effective manner while delivering optimal patient outcomes. The variation in ICER thresholds indicates the agency's recognition of specific medical needs and the importance

>Overall, NICE's consideration of the ICER threshold in relation to specific indications, medical needs, and other influencing factors ensures that the agency maintains a balanced approach towards evaluating cost-effectiveness. Addressing the ICER and other relevant factors will be essential in enhancing patient access to effective treatments, promoting equitable healthcare

