Overview of NICE Cost-Comparison Technology Appraisals: Key Takeaways Regarding Comparator Selection and Methods Used to Demonstrate Comparable Efficacy

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# Aim

This research aimed to analyse the selection of comparators in costcomparison submissions in relation to those specified in the original National Institute for Health and Care Excellence (NICE) scopes, and to identify methods used to determine comparable health benefits.

# Which comparators are most often

## Background

Since 2017, NICE has accepted submissions incorporating cost-comparison analyses via the fast-track appraisal (2017–Jan 2022) and the updated cost-comparison appraisal (Feb 2022–present) routes.<sup>1,2</sup>

These submission routes are intended for therapies that provide similar health benefits at similar or lower cost compared to previously recommended therapies for the same patient population.<sup>1,2</sup> Key decisions in preparing a cost-comparison submission include:

included in NICE cost-comparison submissions?

# How are comparable health benefits demonstrated with the selected comparator(s)?

# Findings

Twenty-eight cost-comparison submissions were identified.

From final NICE scopes, listed comparators were either recommended in previous technology appraisals (TAs) or NICE/Clinical Guidance (NG/CG) documents, were being appraised in an ongoing NICE TA, were best supportive care, or were from an alternate source (Figure 1).

Final NICE scopes included an average of 7 comparators, whereas submission dossiers selected an average of 2 for inclusion.

Submissions to NICE only included comparators from previous NICE TAs, with 1–7 comparators included in analyses.

- Selection of an appropriate comparator or comparators
- Demonstration of comparable efficacy of the intervention and comparator(s)

# Methods

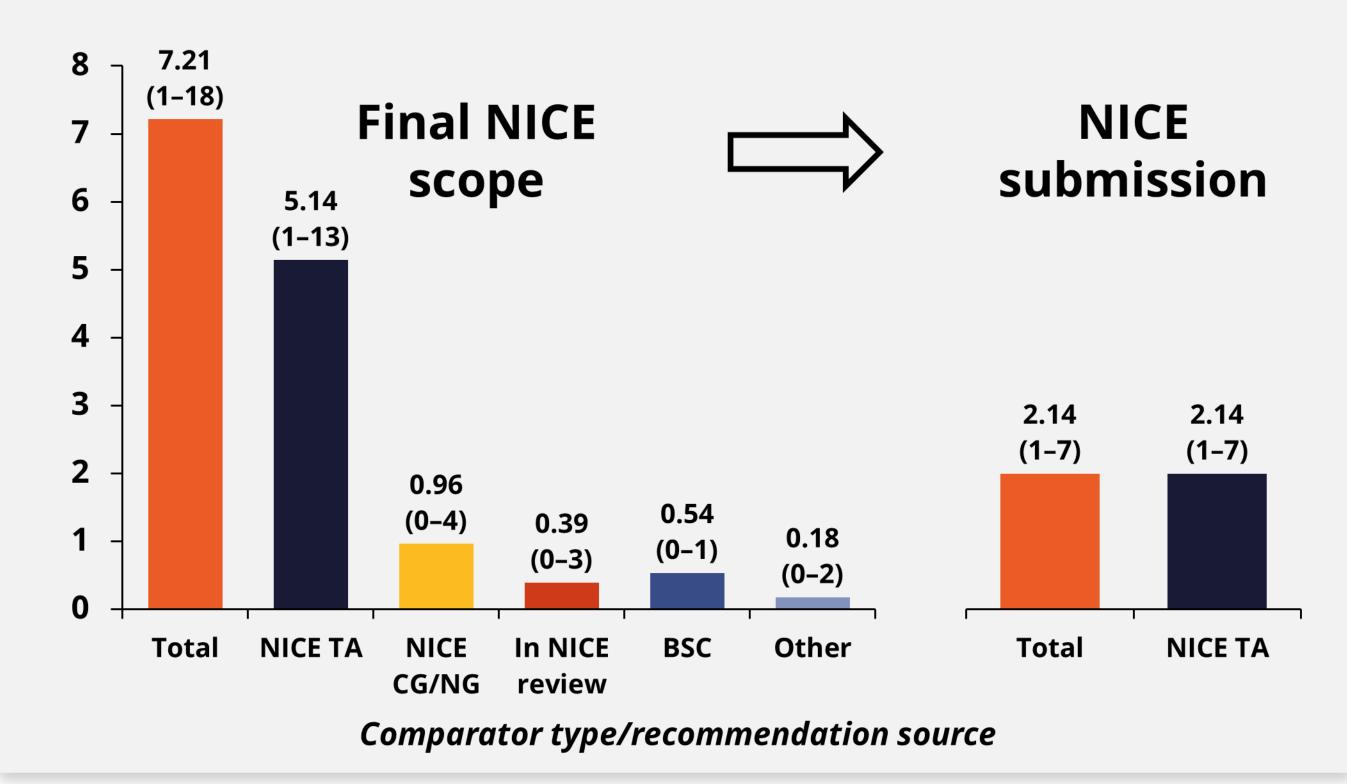
A review of the NICE website using the search term "cost-comparison" with "Guidance" as a filter was executed in March 2023 and updated in June 2024. Technology appraisals were selected for the analysis if they were submitted using the fast-track or updated appraisal route, and if they received a positive recommendation. In addition, "cost-minimisation" was searched, but returned no results for inclusion in the analysis based on the specified criteria.

# Findings

Twenty-seven (96.4%) submissions included an indirect treatment comparison (ITC), while 9 (32.1%) included a head-to-head comparison (Figure 2).

Only one (3.6%) submission included a head-to-head comparison alone,

### **Comparators, mean (range)**

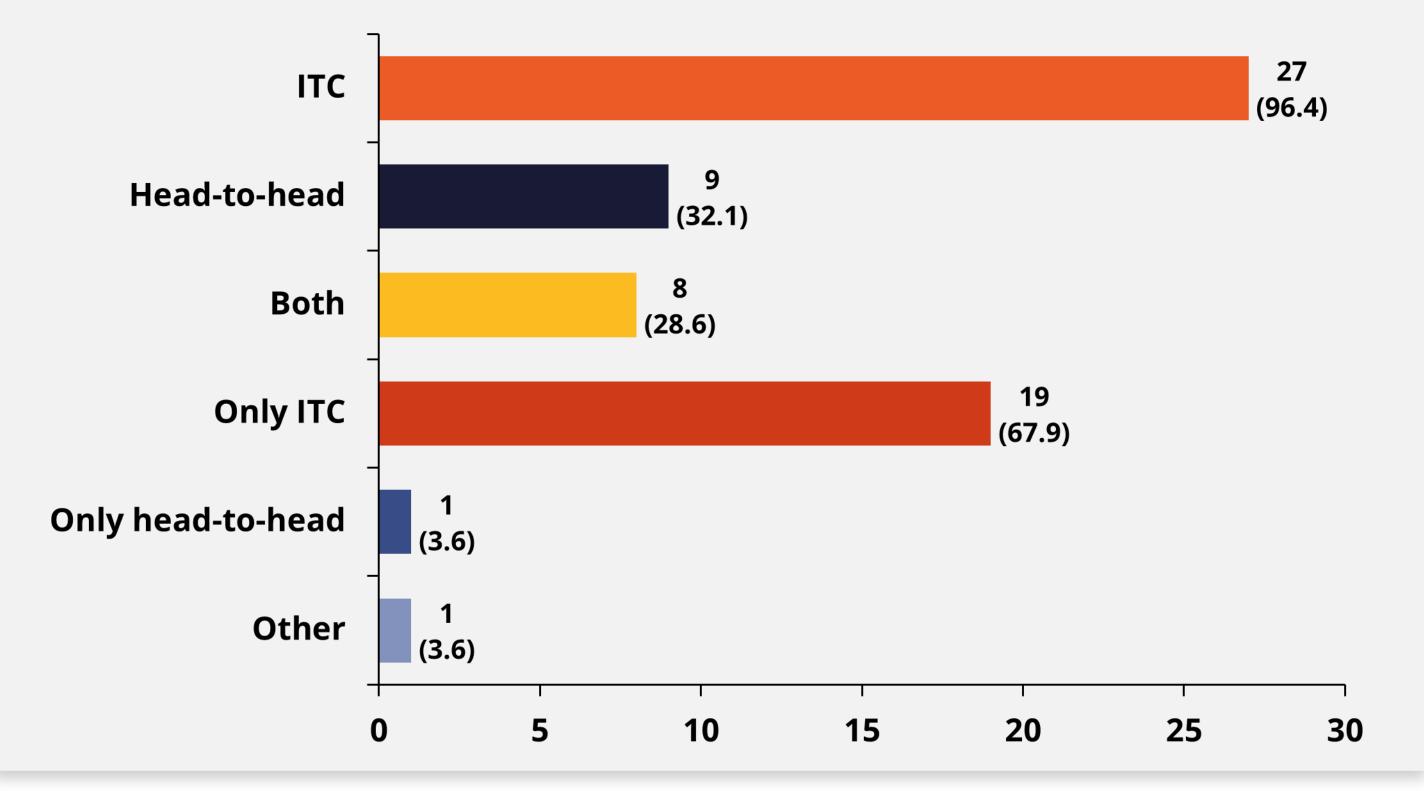


### Figure 1. Comparators in final NICE scope and submission

BSC, best supportive care; CG, clinical guidance; NICE, National Institute for Health and Care Excellence; NG, NICE guidance; TA, technology appraisal. Other includes off-label use or when use in NG was only recommended as an adjunct therapy in clinical trials.

### while 19 (67.9%) submissions included an ITC alone.

## Efficacy comparison methods, n (%)



### *Figure 2*. Methods used to show comparable efficacy

ITC, indirect treatment comparison. Other refers to one submission (TA863), which included bioequivalence data for the intervention and comparator.

## Discussion

**Conclusion:** Comparators in successful NICE cost-comparison submissions were only those included in previous NICE TAs. Almost all submissions included an ITC, with approximately one-third including a head-to-head comparison. **Implications for practice:** Future cost-comparison submissions to NICE can use these insights to select appropriate comparators and efficacy comparison methods. **Implications for research:** This study demonstrated that detailed analysis of NICE cost-comparison submissions can provide valuable insights into successful strategies.

Research assessing the types of clinical endpoints and cost categories that were most influential in yielding positive decisions would be useful to inform future submissions.



#### References

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