HTA54

Beyond RCTs: The Role of Patient Perspectives and Non-Traditional Evidence (NTE) in HTA Decisions

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Background

- RCTs remain the gold standard for evidence preferred by HTA agencies, ideally driven by clinical endpoints.[1,2]
- Agencies are increasingly evaluating submissions supported by pivotal trials employing surrogate endpoints, PROs, QoL measures, and NTE (RWE, ITCs)—though acceptance varies.[3,4]
- Patient input (e.g. testimonies, comments etc.) enhances legitimacy and patient centricity, yet its influence on evidence use remains unclear.[5]
- Practices differ: NICE and PBAC routinely seek patient input; HAS is more limited; G-BA restricts patients to observer roles without procedural influence.[6]
- In oncology, where uncertainty is high, aligning patient perspectives with evidentiary flexibility may help shaping final decisions.

Objectives

1. *Compare how HTA agencies integrate and value patient input in appraisals.*
2. *Evaluate how patient input relates to the inclusion and acceptance of NTE (RWE, ITCs).*
3. *Assess associations between patient input and both the inclusion and interpretation of PROs and QoL data.*

Methods

Study Design & Scope
- Retrospective comparative analysis of HTA decisions (2020-2024).
- Focused on two high-burden oncology indications: breast cancer (BC) and non-small cell lung cancer (NSCLC) as illustrative examples.

Data Source & Sample
- Data extracted from the HTA-Hive database.
- Included appraisals from four agencies: G-BA (Germany), HAS (France), NICE (England & Wales), and PBAC (Australia)
- Total of 162 appraisals were included.

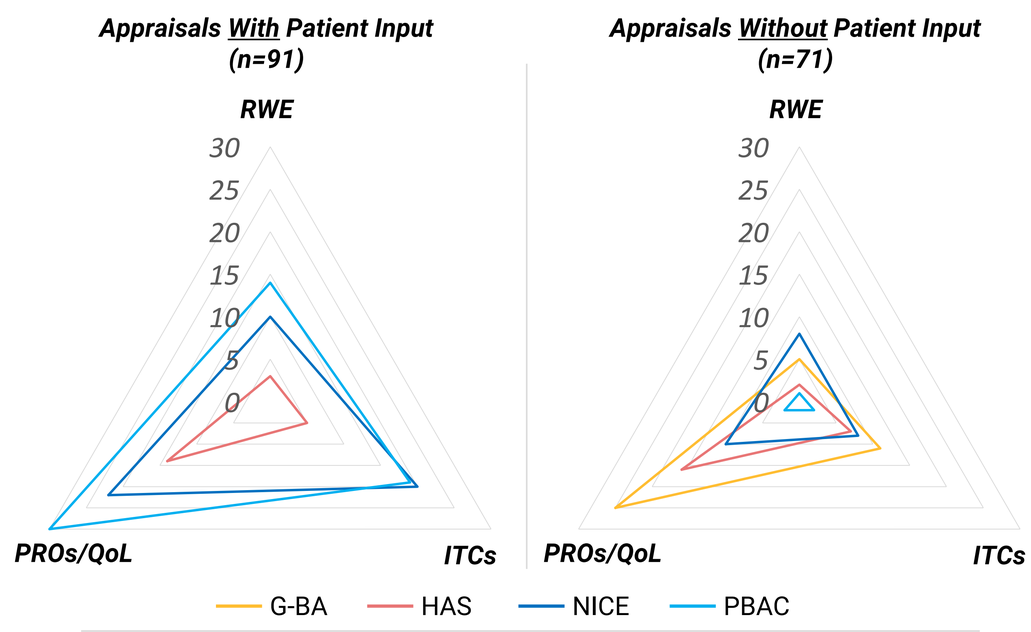
Data Collection Variables
- Inclusion of patient input (present vs. absent)
- Type of primary endpoint (clinical vs. surrogate) for pivotal trials
- Inclusion of: RWE, ITCs, PROs and QoL data (binary)
- Agency judgments per domain (negative, neutral, or positive)

Statistical Analysis
- Associations assessed using Chi-square (χ^2) or Fisher's exact tests as appropriate; effect sizes reported using Cramér's V.
- Pooled and agency-specific analyses were conducted to capture inter-agency variation.

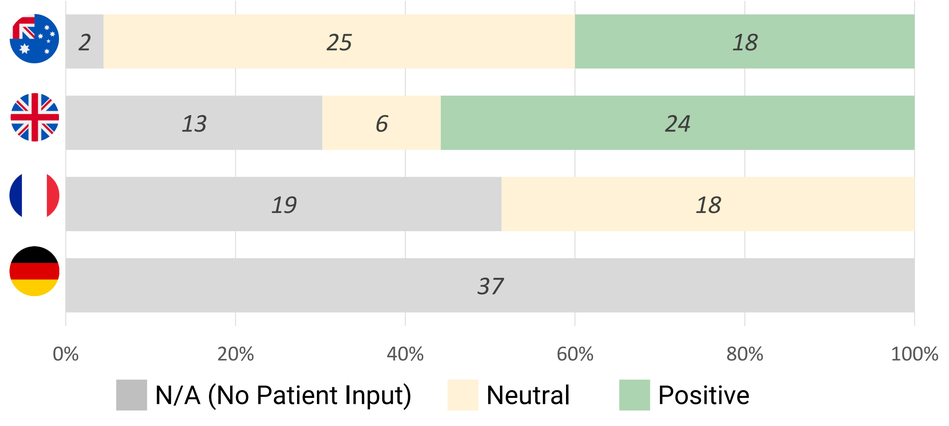
RESULTS

- A total of 162 HTA appraisals were analysed: 91 NSCLC (56%) and 71 BC (44%). G-BA and HAS each accounted for 23% (n=37), NICE for 27% (n=43), and PBAC for 28% (n=45). Positive outcomes were observed in 49%, 43%, 86%, and 56%, respectively (overall 59%; 96/162).
- Patient input was included in 49% of HAS (18/37), 70% of NICE (30/43), and 96% of PBAC (43/45) appraisals; no G-BA reports referenced patient input. Contributors were mainly patient organisations (69%; NICE, PBAC, HAS), patient experts (NICE only, 31%), and individual patients (PBAC only, 26%).
- Across all appraisals, RWE featured in 27% (43/162), ITCs in 44% (72/162), and PROs/QoL data in 73% (119/162). Inclusion varied by agency: G-BA [RWE 14%; ITCs 30%; PROs/QoL 68%]; HAS [14%; 32%; 81%]; NICE [42%; 65%; 74%]; and PBAC [33%; 47%; 71%].
- Patient input inclusion was not associated with the use of RWE, ITCs, or PROs/QoL data, but showed a robust association with submissions driven by pivotal trials using surrogate endpoints (pooled: $\chi^2 = 16.98$, $p < 0.001$; Cramér's V = 0.369), particularly for NICE ($p = 0.0002$).
- Perceptions of patient input differed significantly across agencies ($\chi^2=29.58$, $p<0.001$; Cramér's V=0.570): NICE recorded the highest positive views (80%), PBAC showed mixed responses (42% positive), and HAS remained entirely neutral.
- Agency-stratified analyses showed pronounced effects: patient input strongly shaped judgements on RWE and ITCs. Associations were significant for RWE ($\chi^2=21.86$, $p<0.03$; Cramér's V=0.50) and ITCs ($\chi^2=193.32$, $p<0.00001$; Cramér's V=0.95). NICE and PBAC showed more neutral or positive evaluations regarding the acceptance of such evidence, while HAS remained neutral. G-BA, which lacks patient input, remained consistently negative.
- A moderate association was also observed for PROs/QoL acceptance ($\chi^2=32.96$, $p=0.001$; Cramér's V=0.37), following similar trends—NICE and PBAC leaned toward neutral or positive evaluations, HAS remained neutral, and G-BA negative.

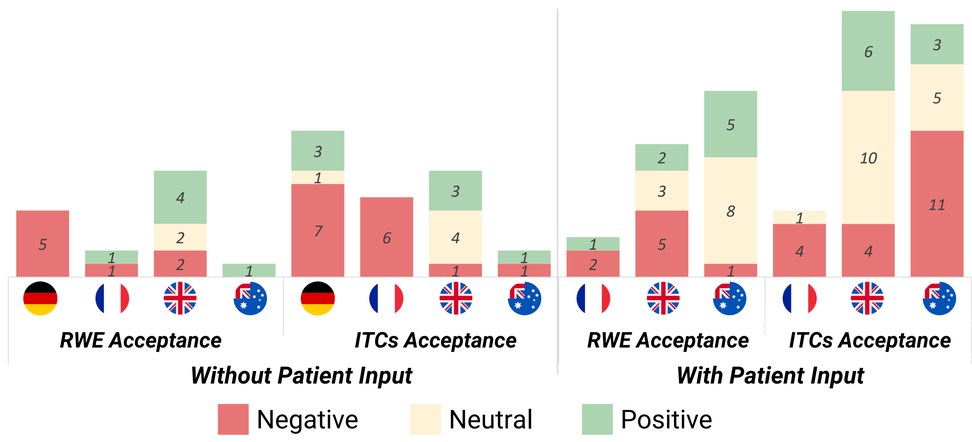
Frequency of Evidence Considered by Presence of Patient Input



Agencies Views of Patient Input



Agencies Views of NTE by Presence of Patient Input



Conclusions

- There is marked divergence across HTA agencies in both the value placed on patient perspectives and the approaches used to incorporate them within value frameworks.
- Patient input appears to reinforce evidentiary flexibility, influencing how agencies interpret and accept different evidence types. Its presence correlated with increased reliance on surrogate endpoints, but not with the use of RWE, ITCs, or PROs/QoL data.
- No overall association was observed between patient input and the acceptance of NTE; however, a significant positive association was found with acceptance of surrogates.
- In cost-effectiveness–driven systems such as NICE and PBAC, patient input was linked to more positive or neutral judgments of NTE.
- These findings suggest that patient input may help legitimise the acceptance of NTE, PROs and QoL measures, particularly in systems balancing clinical, economic, and real-world considerations.

References

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Abbreviations

Non-Traditional Evidence, NTE; Randomized Controlled Trials, RCTs; Health Technology Assessment, HTA; Patient-Reported Outcomes, PROs; Quality of Life, QoL; Real-World Evidence, RWE; Indirect Treatment Comparisons, ITCs; National Institute for Health and Care Excellence, NICE; Pharmaceutical Benefits Advisory Committee, PBAC; Haute Autorité de Santé (French National Authority for Health), HAS; Gemeinsamer Bundesausschuss (Federal Joint Committee), G-BA; Breast Cancer, BC; Non-Small Cell Lung Cancer, NSCLC; Progression-Free Survival, PFS

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