The objective of this study was to provide a clear description of how TEW has been addressed in HTA. Additionally, it also sought to comprehensively review the evidence currently available on the long-term maintenance of ID treatment effects post-treatment discontinuation, which could help inform future TEW analyses.

Figure 1. An overview of this multi-faceted review.

METHODS

Information was reviewed from a range of different, complementary data sources (summarised in Figure 1).

Technology appraisal review

• A review of NICE technology appraisals was conducted, updating a previous review conducted for Bristol-Myers Squibb (BMS) 1.
• NICE technology appraisals (TAs) published up until September 2022 were included if they met the inclusion criteria.
• The presence of a treatment stopping rule for the ID treatment under investigation
• Specific assumptions around TEW

For included TAs, all submission documents were reviewed including final appraisal determinations, committees and paper committee papers with relevant information extracted
• As well as NICE, the following HTA agencies were also searched:
  - Scottish Medicines Consortium (SMC)
  - All Wales Medicines Strategy Group (AWMSG)
  - Canadian Agency for Drugs and Technologies in Health (CADTH)
  - The Pharmaceutical Benefits Advisory Committee (PBAC, Australia)
  - PharmAC (New Zealand)
  - The Institute for Clinical and Economic Review (ICER, USA)

Searching the ISPOR scientific presentations database

A search strategy was generated and presentations that discussed, reviewed, or analysed the relationship between treatment discontinuation and continued survival benefit and/or treatment effect were included, as well as any presentations that discussed, reviewed, or analysed methods used to address TEW in HTA appraisals.

Relevant presentations published up until EPOS Europe 2022 were included.

Targeted Literature Review (TLR)

• A search strategy was derived and PubMed was searched on 19 April 2022 to identify published papers from 2010 onwards that specifically analysed or reviewed treatment effects post-treatment discontinuation for ID treatments.

CONCLUSIONS

• TEW was deemed a key driver of long-term survival benefit in cancer patients who had been treated with ID in many of the RCTs included in the TLR.
• Consideration of TEW in the decision-making process, and the development of methods to inform decision-making, are therefore important in optimising treatment benefit.
• However, further work is needed to better understand the optimal long-term duration of treatment and the effect of TEW on decision-making.

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REFERENCES

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