NICE Cancer Drug Fund Exits: Insights into the Outcomes of Cancer Drug Fund Reappraisals and the Use of Decision Modifiers

EE50

Vidisheva A, Van Hees F, **Thurgar E** | Maple Health Group, LLC, New York, NY, USA

Background

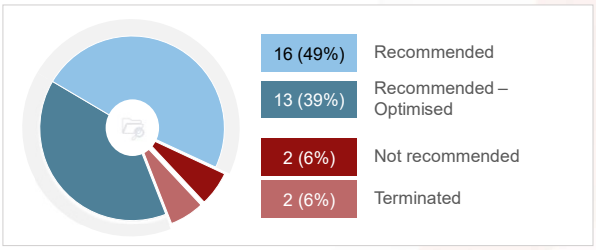
- Cancer drugs evaluated by the National Institute for Health and Care Excellence (NICE) can be recommended for use in the Cancer Drugs Fund (CDF).
- The CDF provides £340 million ringfenced funding to allow interim access to draft technology appraisal (TA) recommendations, or to allow a period of managed access (MA) if additional data collection is needed to resolve uncertainty before treatments may be recommended for routine use.[1]
- Prior to the NICE methods update in 2022, cancer drugs could qualify for the end-of-life (EOL) criteria, a decision modifier which placed greater value on treatments used at end-of-life.
- EOL was replaced by a decision modifier for disease severity (DSM), shifting priority to treatments that produced health gains for moderate-to-severe conditions, across all indications.[2]

Objective: to summarize outcomes from CDF reappraisals and describe when decision modifiers were used pre- and post- MA, and whether NICE considered their use acceptable.

Methods

- All TAs of drugs exiting the CDF between its reformation in 2016 and 20th June 2024 were identified.
- Outcomes from pre- and post- MA were extracted, including the most plausible incremental cost-effectiveness ratio (ICER) and information about the use of EOL or DSM.

Figure 1: CDF Exit appraisal outcomes



Results

Appraisal Outcomes:

- 33 treatments exited the CDF; 29 of these (88%) were recommended for routine commissioning.
- Recommendations in 13 of the 33 TAs (39%) related to a subgroup of the full marketing authorization (referred to as "recommended - optimised").
- Of the 4 treatments (12%) that were not recommended, 2 were not recommended following non-submission by the company (Figure 1, Table 1).

End of Life vs Severity Modifier Use:

- EOL was applied in 15 of the 33 TAs (45%), including in 3 TAs invited to participate after the DSM introduction (although one was a rapid review and did not require a full reappraisal).
- No reappraisals successfully argued for the application of the DSM.

Table 1: Summary of Technology Appraisals

Date of guidance	TA ID/ Status	Technology	Indication	Most plausible ICER at CDF Exit	Modifier at CDF Exit (EOL vs DSM)
13-Jun-18	TA524	Brentuximab vedotin	CD30-positive Hodgkin lymphoma	Subgroup 1: <£30k, Subgroup 2: >£35,606 Subgroup 3: ~£40k	No modifier
18-Jul-18	TA531	Pembrolizumab	Untreated PD-L1-positive metastatic non-small-cell lung cancer	£30,000 to £50,000	EOL
13-May-20	TA629	Obinutuzumab with bendamustine	Follicular lymphoma after rituximab	£15,045 to £17,322	No modifier
14-Oct-20	TA653	Osimertinib	EGFR T790M mutation-positive advanced non-small-cell lung cancer	£41,799 and £49,649	EOL
21-Oct-20	TA655	Nivolumab	Advanced squamous non-small-cell lung cancer after chemotherapy	<£40,168	EOL
17-Feb-21	TA674	Pembrolizumab	Untreated PD-L1-positive, locally advanced or metastatic urothelial cancer when cisplatin is unsuitable	x	No modifier
10-Mar-21	TA683	Pembrolizumab with pemetrexed and platinum chemotherapy	Untreated, metastatic, non-squamous non-small-cell lung cancer	Vs. chemo: < £50,000 Vs. pembrolizumab: £20,000 to £30,000	Vs. Chemo: EOL Vs.Pembrolizumab: No Modifier
17-Mar-21	TA684	Nivolumab	Adjuvant treatment of completely resected melanoma with lymph node involvement or metastatic disease	<£29,011	No modifier
31-Mar-21	TA687	Ribociclib with fulvestrant	Hormone receptor-positive, HER2-negative advanced breast cancer after endocrine therapy	£20,000 to £30,000	No modifier
21-Apr-21	TA691	Avelumab	Untreated metastatic Merkel cell carcinoma	<£30,000	EOL
28-Apr-21	TA692	Pembrolizumab	Locally advanced or metastatic urothelial carcinoma after platinum-containing chemotherapy	x	No modifier
7-Jul-21	TA713	Nivolumab	Advanced non-squamous non-small-cell lung cancer after chemotherapy	£44,169 - £44,547	EOL
15-Sep-21	TA725	Abemaciclib with fulvestrant	Hormone receptor-positive, HER2-negative advanced breast cancer after endocrine therapy	Range included estimates which were above and below £30,000	No modifier
20-Oct-21	TA736	Nivolumab	Recurrent or metastatic squamous cell carcinoma of the head and neck after platinum-based chemotherapy	<£50,000	EOL
27-Oct-21	TA739	Atezolizumab	Untreated PD-L1-positive advanced urothelial cancer when cisplatin is unsuitable	<£50,000	EOL
2-Feb-22	TA766	Pembrolizumab	Adjuvant treatment of completely resected stage 3 melanoma	<£26,493	No modifier
9-Feb-22	TA770	Pembrolizumab with carboplatin and paclitaxel	Untreated metastatic squamous non-small-cell lung cancer	<£50,000	EOL
24-Mar-22	TA780	Nivolumab with ipilimumab	Untreated advanced renal cell carcinoma	£20,000 to £30,000	No modifier
13-Apr-22	TA783	Daratumumab monotherapy	Relapsed and refractory multiple myeloma	<£50,000	EOL
20-Apr-22	TA784	Niraparib	Maintenance treatment of relapsed, platinum-sensitive ovarian, fallopian tube and peritoneal cancer	£20,000 to £30,000	No modifier
8-Jun-22	TA795	Ibrutinib	Waldenstrom's macroglobulinaemia	x	No modifier
15-Jun-22	TA796	Venetoclax	Chronic lymphocytic leukaemia	£50,000	EOL
22-Jun-22	TA798	Durvalumab	Maintenance treatment of unresectable non-small-cell lung cancer after platinum-based chemoradiation	£20,000 to £30,000	No modifier
29-Jun-22	TA802	Cemiplimab	Advanced cutaneous squamous cell carcinoma	£30,952 to £50,000	EOL
26-Oct-22	TA836	Palbociclib with fulvestrant	Hormone receptor-positive, HER2-negative advanced breast cancer after endocrine therapy	Cost-comparison analysis	No modifier
22-Feb-23	TA870	Ixazomib with lenalidomide and dexamethasone	Relapsed or refractory multiple myeloma	<£30,000	No modifier
28-Feb-23	TA872	Axicabtagene ciloleucel	Diffuse large B-cell lymphoma and primary mediastinal large B-cell lymphoma after 2 or more systemic therapies	<£50,000	EOL
6-Jun-23	TA897	Daratumumab with bortezomib and dexamethasone	Previously treated multiple myeloma	<£50,000	EOL
5-Jul-23	TA908	Olaparib	Maintenance treatment of relapsed, platinum-sensitive ovarian, fallopian tube or peritoneal cancer after 2 or more courses of platinum-based chemotherapy	£20,000 to £30,000	No modifier
29-Nov-23	TA933	Tisagenlecleucel	Treating relapsed or refractory diffuse large B-cell lymphoma after 2 or more systemic therapies	x	No modifier
13-Dec-23	TA939*	Pembrolizumab and chemotherapy with or without bevacizumab	Persistent, recurrent or metastatic cervical cancer	<£50,000	EOL*
17-Jan-24	TA946	Olaparib with bevacizumab	Maintenance treatment of advanced high-grade epithelial ovarian, fallopian tube or primary peritoneal cancer	<£20,000	No modifier
28-Mar-24	TA962	Olaparib	Maintenance treatment of BRCA mutation-positive advanced ovarian, fallopian tube or peritoneal cancer after response to first-line platinum-based chemotherapy	<£30,000	No modifier

Footnote: The line indicates TAs invited to participate after the introduction of DSM criteria; * TA939 was a rapid review and thus did not require a full CDF exit reappraisal

Conclusion

- There continues to be a high success rate for treatments exiting the CDF into routine commissioning.
- Historically, treatments qualifying for EOL benefited from a higher cost-effectiveness threshold.
- It remains uncertain whether shifting from EOL to DSM will affect the proportion of treatments exiting the CDF in the future.

References

1. NHS England. (2022). *The innovative medicines fund principles.* NHS England. https://www.england.nhs.uk/wp-content/uploads/2022/06/B1686-the-innovate-medicines-fund-principles-june-2022.pdf.
2. NICE Health Technology Evaluations: the Manual. National Institute for Health and Care Excellence www.nice.org.uk/process/pmg36

MAPLE HEALTH GROUP

Presented at ISPOR European Conference, Barcelona. 17th-20th November 2024