HTA133

The number of NICE appraisal terminations is increasing, and products with multiple indications are disproportionally impacted.

Mitchell H.[1]; Rashid H. [1]; Hastie J. [1]; Hudson R.D.A [1]

[1]Sanofi UK, Reading, United Kingdom

Contact: Helen Mitchell, HEOR Associate, Sanofi UK & IE, helen.mitchell@sanofi.com

BACKGROUND

- The National Institute for Health and Care Excellence (NICE) is responsible for determining the clinical and cost effectiveness of new technologies in England for routine commissioning by the National Health Service (NHSE).
- One conclusion of a NICE appraisal is termination which occurs if a manufacturer chooses not to make a submission or if NICE believe an appraisal would be futile[1].
- Reasons for manufacturers not submitting vary, including insufficient clinical data or inability to demonstrate cost-effectiveness. For multi-indication products, as pricing by indication is not currently a standard contracting option under the NHSE Commercial Framework[2], the requirement to show cost-effectiveness at a price set by a previous indication can be a further barrier to entry.
- The objective of this review was to explore submission and termination trends over time and determine if products with multiple indications were disproportionally impacted in the latter.

METHODS

- This was a retrospective review to determine appraisal termination trends of multi-indication and single indication products over time. Both “Published” and “In Development” guidance were considered.
- Combination therapy submissions (Published n=108); In Development n=60) were excluded to avoid potential confounding of multi-indication issues with reimbursement challenges for combination products. A similar analysis for combination products has been previously undertaken[3] .
- A list of published and in development Technology and Highly Specialised Technology guidance was extracted from the NICE website with a cut-off date of 02.09.23[4,5].
- For the “Published” dataset, appraisals were categorised based on the number of separate appraisals that were published for that product:
  - “Single” indication products were counted if one appraisal for one indication was published.
  - “Multi-indication” products were counted if two or more appraisals for different indications were published.
- Appraisals were further categorised based on whether they were published pre- or post-July 2016, when NICE methods changed to manage entry to the Cancer Drugs Fund.
- For the “In Development” dataset, appraisals were categorised based on the number of separate appraisals that were published or in development for that product:
  - “Follow-on” indications were counted if an appraisal was in development and guidance for a different indication for the same product already published.
  - “Originator” indications were counted if one appraisal was in development with no previous guidance published for that product.
  - “Multiple In Development Only” indications were counted if multiple appraisals for different indications were in development without a previously reimbursed indication.

REVIEW SIZE

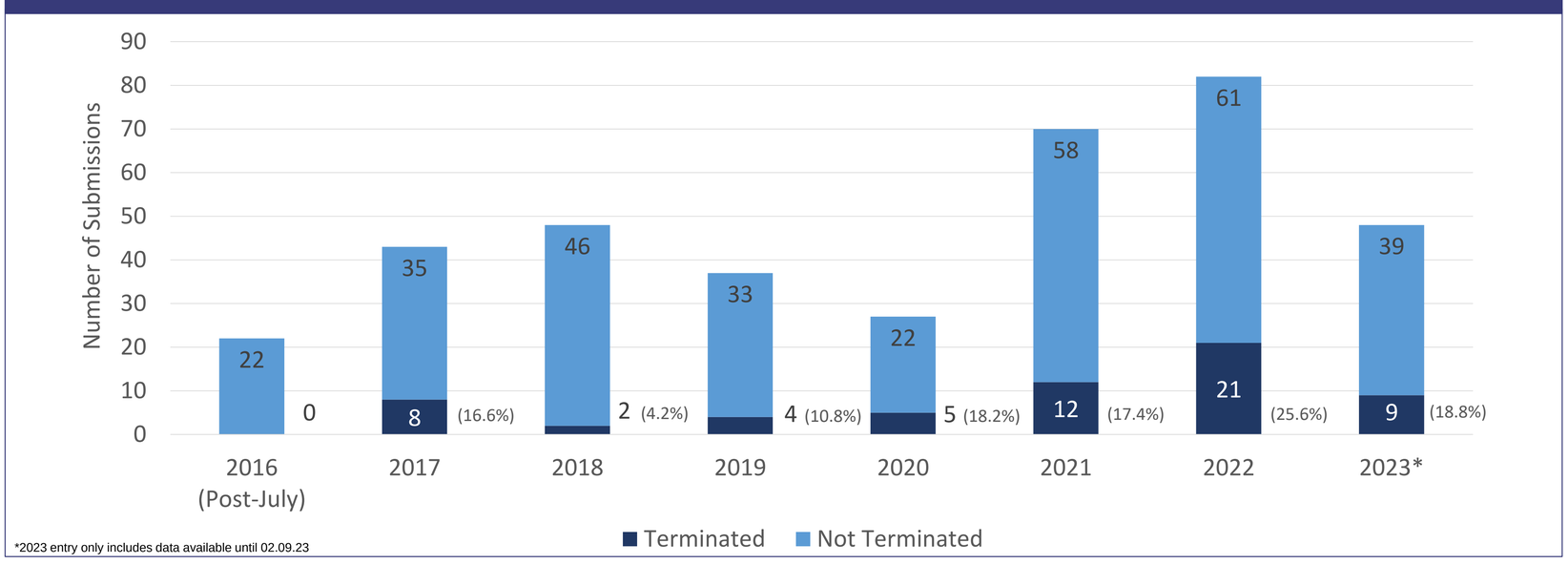
- The review primarily considered three groups, “Published: all” (n=582), “Published: post-July 2016” (n= 377) and “In Development” (n=199).
- A secondary group, “All multi-indication submissions” (n=332) was considered to provide context for why post-July 2016 was an appropriate marker for multi-indication appraisals.

RESULTS

Published Appraisals

- 79.2% (n=61/77) of NICE terminations happened post-July 2016.
- Post-July 2016, 16.2% (n=61/377) of submissions were terminated, with an average annual termination rate of 13.6% as a proportion of submissions (Figure 1).
- The absolute number of terminations is generally increasing, with a steep rise observed from 2020 (Figure 1). The number of submissions is also increasing (2023 includes data until 02.09.23).

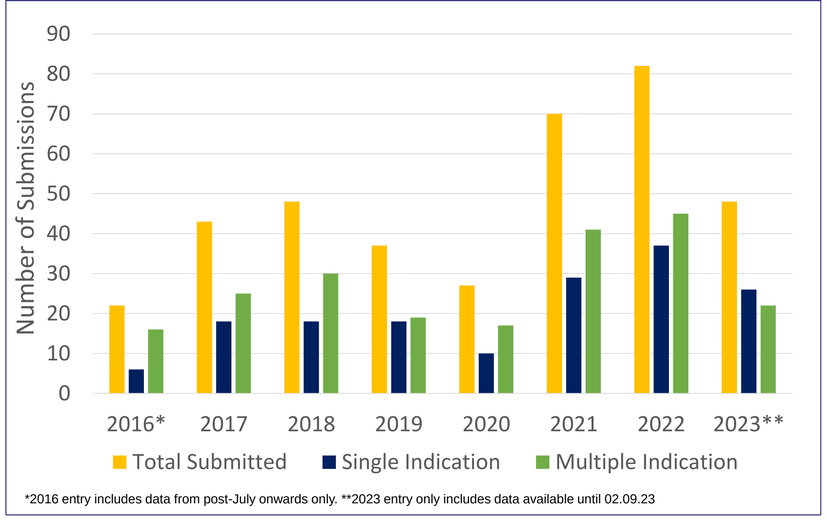
Figure 1. Annual NICE appraisal terminations as a proportion of submissions since July 2016



*2023 entry only includes data available until 02.09.23

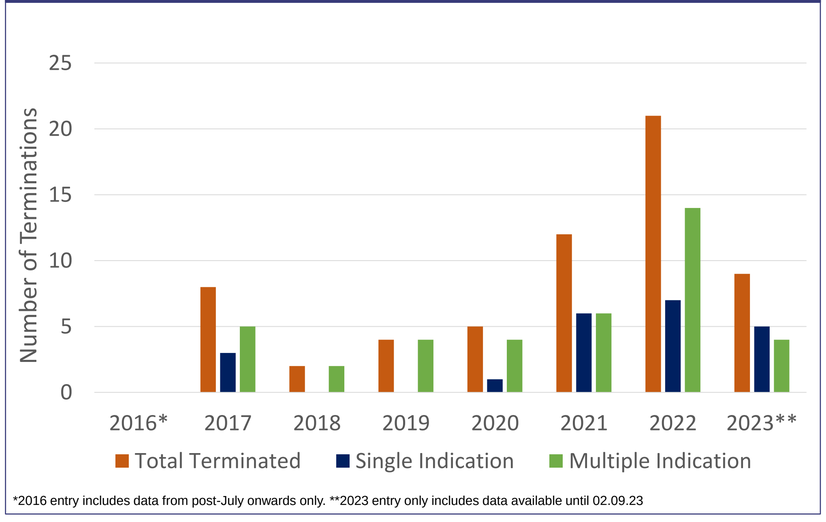
- 64.8% (n=215/332) of all multi-indication submissions were made in the seven years post-July 2016 compared to the 15 years previous (data not shown).
- These 215 multi-indication appraisals accounted for 57.0% (n=215/377) of all submissions made post-July 2016 (Figure 2).
- Despite this, multi-indication appraisals accounted for 63.9% (n=39/61) of total terminations post-July 2016, with absolute numbers of multi-indication terminations increasing year on year since 2020 (2020, n=4; 2021, n=6; 2022, n=14; Figure 3).
- This disparity is particularly striking when considering the most recent full year (2022), whereby multi-indication appraisals (n=37) saw 22% more submissions than single indication appraisals (n=45) but double the number of terminations (Figure 3).

Figure 2. Annual NICE appraisal submissions per indication category



*2016 entry includes data from post-July onwards only. **2023 entry only includes data available until 02.09.23

Figure 3. Annual NICE appraisal terminations per indication category

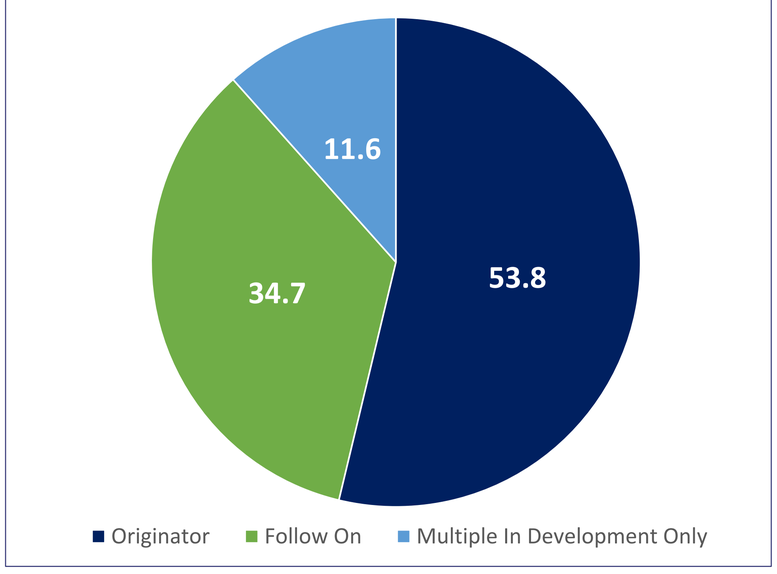


*2016 entry includes data from post-July onwards only. **2023 entry only includes data available until 02.09.23

Appraisals In Development

- 53.8% (n=107/199) of entries were for originator indications, 34.7% (n=69/199) were follow-on indications for a previously recommended/optimised product, and 11.6% (n=23/199) were for multiple indications in development without a previously reimbursed indication (Figure 4).
- A significant proportion (46.3%) of appraisals currently in development can therefore be considered as multi-indication.

Figure 4. Breakdown of NICE appraisals In Development based on indication category (%)



CONCLUSIONS

Terminations disproportionately impact products with multiple indications.

- **Multi-indication products represent almost half of the appraisals currently in development at NICE, and both total terminations and multi-indication submissions are trending upwards. This is likely to be an issue of increasing importance.**
- **This raises serious concerns about potential systemic pricing barriers impacting patient access to innovative multi-indication technologies in England, now and in the future.**
- **In line with the NICE 2021- 2026 strategy[6], as the number of multi-indication products increases, innovative access and reimbursement models are urgently required to support timely access for patients.**
- **As a first step NICE should consider extending their newly implemented proportionate approach to address this issue.**

FUTURE RESEARCH

Further work is needed to understand the potential impact of terminated multi-indication appraisals on patients themselves.

- **Preliminary analysis of 19 recent representative terminated multi-indication appraisals extrapolated to the total number of multi-indication terminations (n=49) shows up to 50,000 patients in the UK could be denied access to licenced new treatments[7].**
- **This extrapolation to all terminated appraisals may be an overestimate because appraisals where termination was due to lack of clinical data were excluded from the representative sample (n=19), but this was not possible for the extrapolation.**
- **Future estimates encompassing all terminations with reasons would ensure a more accurate estimation and help to elucidate the extent to which systemic pricing barriers contribute to reduced patient access.**

REFERENCES

1. NICE, *Guide to the processes of technology appraisal,* 30 May 2018
2. NHSE, *NHS commercial framework for new medicines,* 06 June 2022
3. HPR201 Combination Policy: Value of Combination Treatments and the Future in Cancer Management. *Value in Health* 25(12): S269-S270
4. NICE, *Published guidance, NICE advice and quality standards*, accessed 31 August 2023 <https://www.nice.org.uk/guidance/published?ngt=Highly%20specialised%20technologies%20guidance&ngt=Technology%20appraisal%20guidance>
5. NICE, *Guidance, NICE advice and quality standards in development,* accessed 02 September 2023 <https://www.nice.org.uk/guidance/indevelopment?ngt=Highly+specialised+technologies+guidance&ngt=Technology+appraisal+guidance>
6. NICE, *NICE Strategy 2021 to 2026*, April 2021
7. Sanofi Data on File, *NICE Multi-Indication Terminations- Preliminary Analysis of Potential Patient Impact*, October 2023

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