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SUMMARY

OBJECTIVES

- The aim of this research was to investigate variations in timelines between initial submissions and subsequent resubmissions for assessments of highly specialised technologies (HSTs) by NICE.

METHODS

- Of the 29 NICE HST assessments, six were eligible for inclusion in this study: one submission and one resubmission for three products.
- These products were asfotase alfa, ataluren, and onasemnogene abeparvovec.
- Original timelines, from invitation to submit to posting of the final appraisal document (FAD), were compared with the resubmission timelines. Additionally, the reasons for resubmissions were investigated.

FINDINGS

- On average, resubmission timelines were much shorter than original submission timelines. However, ataluren had similar timelines for the initial submission and the resubmission.
- On average, resubmissions required fewer committee meetings than original submissions. Although, ataluren had the same number of committee meetings for the initial submission and the resubmission.
- Generally, resubmissions took place because additional data became available at a later date, the original submission having been accepted under a managed access agreement (MAA).

CONCLUSIONS

- MAAs necessitate resubmissions upon the publication of new evidence. All three reassessed submissions succeeded with their new data, and one expanded its patient reach. Resubmission timelines matched or were shorter than initial submissions.

BACKGROUND & AIMS

- NICE highly specialised technology (HST) submissions are often for ultra-orphan diseases with limited trial data available. Given this inherent challenge, the submissions often incorporate managed access agreements (MAAs). Such agreements mandate a re-evaluation of the initial recommendation once additional evidence becomes available through subsequent publications or studies.
- This study examined the disparities between the submission and resubmission processes within the framework of NICE's HST assessments. By examining these timelines and differences, the research sought to shed light on the dynamics of decision-making within the assessment landscape, particularly in the context of evolving evidence bases for rare and complex diseases.

METHODS

- Of the comprehensive pool of 29 NICE HST assessments, six met the eligibility criteria for inclusion in this study.
- The evaluation therefore focused on one initial submission and a subsequent resubmission for three distinct products. These products were asfotase alfa, ataluren, and onasemnogene abeparvovec.
- To gauge the efficiency and progression of the assessment process, the original timelines—spanning from the initial invitation to submit to the publication of the final appraisal document (FAD)—were juxtaposed with the timelines of their respective resubmissions. Additionally, a detailed examination was conducted to identify and analyse the underlying reasons which prompted the need for resubmissions.

RESULTS

- Resubmission timelines were shorter than original submission timelines for asfotase alfa (722 days fewer) and onasemnogene abeparvovec (449 days fewer) (Figure 1). Average timelines were overall much shorter for resubmissions (Table 2).
- Fewer committee meetings were also required for these drugs during their resubmission: 5 versus 2 meetings for asfotase alfa and 3 versus 1 for onasemnogene abeparvovec (Figure 2). The mean number of committee meetings required for original submissions was 3.33. The mean number of committee meetings for resubmissions was much lower, at 1.67.
- Ataluren had the same number of committee meetings and similar timelines for the original submission versus the resubmission, with the resubmission being only eight days shorter.
- Resubmissions primarily took place because new data had become available (see Table 1). Asfotase alfa had data collected as part of a market access agreement (MAA) in the original submission. Ataluren also had a MAA with a requirement for new data, as well as real-world evidence collected outside clinical trials. For onasemnogene abeparvovec, clinical evidence for presymptomatic spinal muscular dystrophy led to a change in population: the original population only included Type 1 spinal muscular atrophy.

Table 1. Likely reasoning for resubmissions needing to take place

Product	Likely reason for resubmission
Asfotase alfa	More data: this evaluation reviews the evidence for asfotase alfa for treating paediatric-onset hypophosphatasia (NICE Highly Specialised Technologies Guidance 6), including evidence collected as part of the managed access agreement.
Ataluren	New data: this evaluation reviews existing trial data, additional evidence collected as part of the managed access agreement for NICE Highly Specialised Technologies Guidance 3, and new real-world evidence (evidence collected outside clinical trials) on ataluren.
Onasemnogene abeparvovec	New clinical trial evidence for presymptomatic SMC: slight change to population (Type 1 spinal muscular atrophy vs presymptomatic spinal muscular atrophy)

Figure 1. Timelines from invitation to submission to FAD: initial submission versus resubmission

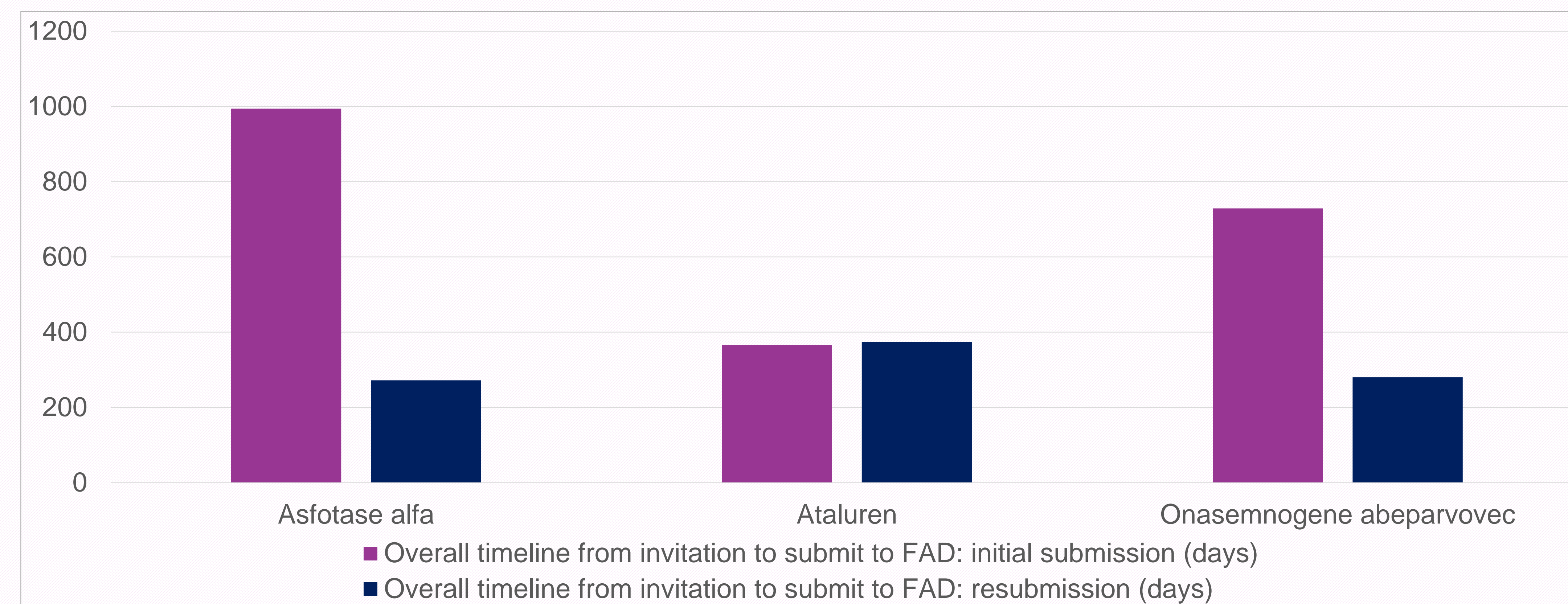


Figure 2. Number of required committee meetings for the initial submission versus resubmission

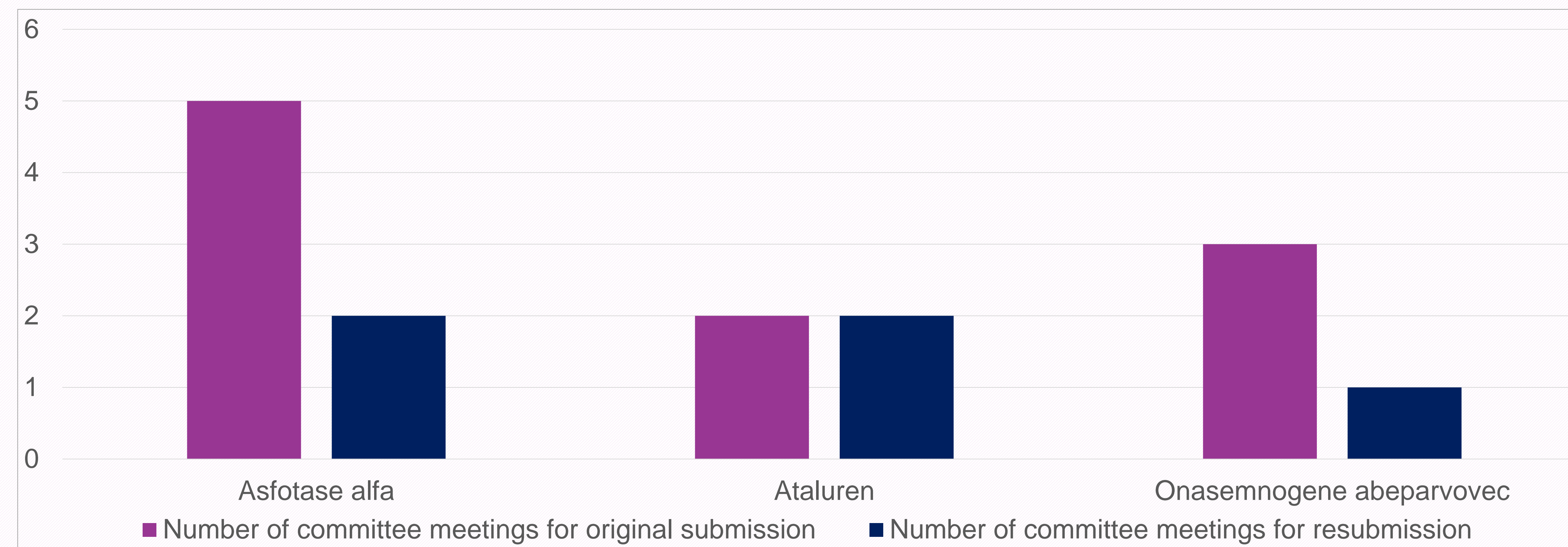


Table 2. Average timelines for submissions versus resubmissions

	Overall timeline from invitation to submit to FAD: initial submission	Overall timeline from invitation to submit to FAD: resubmission
Average	696.33 days	308.67 days
Standard deviation	315.27	56.72

CONCLUSIONS

- MAAs require a resubmission when additional evidence is published. This was the case for the three resubmissions assessed; with increased data availability, all products achieved successful recommendations, with one submission targeting a wider patient population. Resubmission timelines were either comparable to or shorter than original submission timelines.

References

1. NICE website – HST submissions