TRENDS AND KEY DECISION DRIVERS FOR REJECTING AN ORPHAN DRUG SUBMISSION ACROSS FIVE DIFFERENT HTA AGENCIES

INTRODUCTION
Access to orphan drugs is often inconsistent, and is hindered by difficulties in demonstrating value in HTA appraisals due to the small patient populations and insufficient data.

AIM
To inform future submissions, we examined the trends and key decision drivers that resulted in a submission being rejected across five HTA agencies.

RESULTS
A total of 29 drugs were licensed for the treatment of 8 rare diseases. PBAC and SMC had the lowest rejection rates, while NICE had the highest [Figure 1].

When data were examined by disease, 100% of assessments for RCC resulted in a rejection across all HTA agencies (Figure 2). When data were examined by disease, 100% of assessments for RCC resulted in a rejection across all HTA agencies (Figure 2).

There was a trend towards higher rejection rates for diseases with a higher prevalence rate, as reported by Orphanet at the time of data collection (Figure 3).

The most common decision drivers leading to rejection of HTA submissions across the five agencies were uncertainties in economic evidence and lack of cost-effectiveness (Figure 4).

CONCLUSIONS
• The proportion of rejected submissions varied by HTA agency, particularly within the HTA bodies in the UK, highlighting inconsistencies in decision-making. Uncertainties in economic evidence and lack of cost-effectiveness were key decision drivers that led to a submission being rejected across all HTA agencies.
• An association between prevalence rate and the proportion of rejected submissions was found, with lower rates of disease prevalence correlating with higher acceptance rates. This is most likely due to the lower budget impact incurred in smaller patient populations.

METHODS
Orphanet database (www.orpha.net) was searched for orphan drugs with a marketing authorization between 2002 and July 2014. Rare diseases for which two or more orphan drugs were available were selected. Decisions from five HTA agencies were considered: AWMSG (Wales), CADTH (Canada), NICE (England), PBAC (Australia), and SMC (Scotland). Assessments that resulted in a rejection were examined for key decision drivers, and for trends and variation by disease type.

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ABBREVIATIONS

Figure 1: Acceptance/rejection rates of orphan drugs by HTA agency

Figure 2: Acceptance/rejection rates of orphan drugs by disease

Figure 3: Rejection rates of orphan drugs by disease prevalence

Figure 4: Key decision drivers leading to rejection of a submission by HTA agencies