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Evidence Review Group Report commissioned by the NIHR HTA Programme on behalf of NICE

Atezolizumab in combination for treating advanced non-squamous non-small-cell lung cancer

Additional Erratum

Replacement pages in addition to Erratum following the factual accuracy check by Roche Product Limited

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Stopping rule	2 year maximum in the base case. Scenario with no limit on treatment duration. This aligns with stopping rules for atezolizumab after chemotherapy (TA520) and pembrolizumab (TA531).	No change
Effect duration	5 year cut off for OS (3 years after stopping), with scenario analysis from 8.75 to 20 years In the revised model this was applied by setting the mortality rate for Atezo+Bev+CP equal to that for PEM+plat with maintenance.	No change for base case, but extend the scenario analysis due to uncertainty over the duration of effects after discontinuation of immunotherapies (e.g. as noted in TA 520).
Clinical parameters		
Fitted survival curves for atezolizumab combination	ITT & PD-L1 low • OS exponential • PFS KM + log-logistic tail • TTD exponential	ERG base case: The ERG prefers the Weibull distribution for OS extrapolation (section 4.2.4.1). The choice of parametric curves for PFS and TTD are reasonable.
	EGFR/ALK +ve subgroup • OS exponential • PFS log-normal • TTD exponential	
	KM tails attached where 20% of patients remain at risk Parametric curves fitted separately to Atezo+Bev+CP arm of IMpower150 (Jan 2018 cut off with investigator-assessed PFS).	
Relative effects	HR from ITT NMA FP (FE) P1=0 Weibull (scenarios: PH and RE NMA models, excluding KEYNOTE, excluding PARAMOUNT)	The ERG prefers the analysis excluding the PARAMOUNT trial (due to heterogeneity), with first order Weibull, fixed effects.
AE rates	See CS Tab 43 p132	No change
Utilities		
Health state	IMpower150 EQ-5D IPD time from death analysis (IMpower150 PF/PD, Huang, Nafees, Chouaid)	No change to health state utilities, however company has not included any differences in utility between the treatments.

4.4.2 ERG base case and scenarios

Results for the ERG base case analysis for the ITT population are shown in Table 52 (PAS for atezolizumab and bevacizumab only). This analysis uses NMA results excluding the PARAMOUNT trial, so results are only available verses the comparator with pemetrexed maintenance. Equivalent results for the PD-L1 low/negative and EGFR/ALK positive populations are shown in Table 53 and Table 54.

Table 1 ERG base case for ITT population (PAS for atezolizumab and bevacizumab and list price for comparators and subsequent treatments)

Technologies	Total costs (£)	Total QALYs	ICER (£) fully incremental analysis	ICER (£) pairwise; Atezo+Bev+CP vs comparator
PEM+platinum w PEM maint	[redacted]	[redacted]		Dominant
Atezo+Bev+CP	[redacted]	[redacted]	Dominant	

Table 2 ERG base case results for PD-L1 population (PAS for atezolizumab and bevacizumab and list price for comparators and subsequent treatments)

Technologies	Total costs (£)	Total QALYs	ICER (£) fully incremental analysis	ICER (£) pairwise; Atezo+Bev+CP vs comparator
PEM+platinum w PEM maint	[redacted]	[redacted]		Dominant
Atezo+Bev+CP	[redacted]	[redacted]	Dominant	

Table 3 ERG base case results for EGFR/ALK population (PAS for atezolizumab and bevacizumab and list price for comparators and subsequent treatments)

Technologies	Total costs (£)	Total QALYs	ICER (£) fully incremental analysis	ICER (£) pairwise; Atezo+Bev+CP vs comparator
PEM+platinum w PEM maint	[redacted]	[redacted]		£3,352
Atezo+Bev+CP	[redacted]	[redacted]	£3,352	

The results of scenarios around the ERG ITT base case are shown in Table 55. Although these analyses do not reflect agreed price discounts for pemetrexed maintenance or for some subsequent treatments, they do indicate which parameters the model is most sensitive to: extrapolations of overall survival and treatment duration, the use of a stopping rule for