Dexamethasone intravitreal implant for diabetic macular oedema

ERG's additional analyses at the request of the Chair of the Appraisal Committee and the NICE technical team during the Appraisal Committee pre-meeting briefing

BMJ Technology Assessment Group

Evidence Review Group (ERG) additional results from the ERG revised base case economic analysis for dexamethasone intravitreal implant used in the treatment of diabetic macular oedema

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At the request of the Chair of the Appraisal Committee and the NICE technical team during the Appraisal Committee pre-meeting briefing the Evidence Review Group has provided the following additional results from the ERG's revised base case economic analysis assessing the cost effectiveness of dexamethasone intravitreal implant for the treatment of diabetic macular oedema, for different levels of price discount for fluocinolone acetonide and ranibizumab. The ERG's revised base case economic analysis includes ERG corrections B1-B5 and scenarios C5-C12, as described in the ERG report[1] in Section 5.5.2.

1. Patients with DMO who are considered to be insufficiently responsive to non-corticosteroid therapy

Table 1. Results of revised scenario analysis by ERG: patients with DMO who are considered to be unsuitable for, or insufficiently responsive to non-corticosteroid therapy; comparison between dexamethasone and fluocinolone acetonide, assuming different levels of price discounts for fluocinolone acetonide

Technologies	Total		Incremental		ICER (cost per QALY)
	Cost	QALY	Cost	QALY	
Fluocinolone acetonide at list price					
Dexamethasone	£16,601	5.7438			
Fluocinolone acetonide	£20,170	5.8220	£3,569	0.0781	£45,684*
Fluocinolone acetonide at 10% discount					
Dexamethasone	£16,601	5.7438			
Fluocinolone acetonide	£19,183	5.8220	£2,582	0.0781	£33,047*
Fluocinolone acetonide at 20% discount					
Dexamethasone	£16,601	5.7438			
Fluocinolone acetonide	£18,196	5.8220	£1,595	0.0781	£20,411*
Fluocinolone acetonide at 30% discount					
Dexamethasone	£16,601	5.7438			
Fluocinolone acetonide	£17,209	5.8220	£607	0.0781	£7,775*
Fluocinolone acetonide at 40% discount					
Dexamethasone	£16,601	5.7438			
Fluocinolone acetonide	£16,222	5.8220	-£380	0.0781	Fluocinolone acetonide dominates
Fluocinolone acetonide at 50% discount					
Dexamethasone	£16,601	5.7438			
Fluocinolone acetonide	£15,235	5.8220	-£1,367	0.0781	Fluocinolone acetonide dominates

Abbreviations used in the table: DMO, diabetic macular oedema; ERG, evidence review group; ICER, incremental cost-effectiveness ratio; QALYs, quality-adjusted life years.
*Fluocinolone acetonide vs dexamethasone

2. Patients with DMO who are pseudophakic

Table 2. Results of revised scenario analysis by ERG: patients with DMO who are pseudophakic; comparison between dexamethasone and ranibizumab, assuming different levels of price discounts for ranibizumab

Technologies	Total		Incremental		ICER (cost per QALY)
	Cost	QALY	Cost	QALY	
Ranibizumab at list price					
DEX	£12,841	5.0894			
Ranibizumab	£20,219	5.2054	£7,378	0.1160	£63,609*
Ranibizumab at 10% discount					
Dexamethasone	£12,841	5.0894			
Ranibizumab	£18,886	5.2054	£6,045	0.1160	£52,119*
Ranibizumab at 20% discount					
Dexamethasone	£12,841	5.0894			
Ranibizumab	£17,554	5.2054	£4,713	0.1160	£40,630*
Ranibizumab at 30% discount					
Dexamethasone	£12,841	5.0894			
Ranibizumab	£16,221	5.2054	£3,380	0.1160	£29,141*
Ranibizumab at 40% discount					
Dexamethasone	£12,841	5.0894			
Ranibizumab	£14,888	5.2054	£2,047	0.1160	£17,651*
Ranibizumab at 50% discount					
Dexamethasone	£12,841	5.0894			
Ranibizumab	£13,556	5.2054	£715	0.1160	£6,162*

Abbreviations used in the table: DMO, diabetic macular oedema; ERG, evidence review group; ICER, incremental cost-effectiveness ratio; QALYs, quality-adjusted life years.
*Ranibizumab vs dexamethasone

Reference

Edwards SJ, Wakefield V, Mavranezouli I, Karner C, Marceniuk G, Azuara-Blanco A. Dexamethasone intravitreal implant for diabetic macular oedema: A Single Technology Appraisal. BMJ-TAG, 2014.