

LIVERPOOL REVIEWS AND IMPLEMENTATION GROUP (LRiG)

Teclistamab for treating relapsed or refractory multiple myeloma after three treatments (Review of TA869) [ID6333]

Addendum 2

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CONTAINS COMMERCIAL IN CONFIDENCE DATA

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1 INTRODUCTION

To inform the National Institute for Health and Care Excellence Single Technology Appraisal process of the clinical and cost effectiveness of teclistamab for treating relapsed or refractory multiple myeloma after three treatments, the company (Janssen) presented cost effectiveness results generated by a model developed in MS Excel.

To inform their submission, the company asked three clinical experts for OS, PFS and TTD estimates at 5, 10 and 15 years for patients treated with teclistamab or treated with PomDex. Each of the three experts provided a *lowest* plausible value, a *most* plausible value and a *highest* plausible value. The company used the mid-point of the range of *most* plausible values for calibration purposes in their economic model. The EAG then produced pessimistic and optimistic scenarios based upon the lowest and highest range of *most* plausible values provided by the three clinicians.

Following the pre-ACM1 PMB, NICE asked the EAG to produce results from two additional scenarios:

- most optimistic scenario: biggest difference in patient outcomes and lowest difference in treatment costs between teclistamab and PomDex
- most pessimistic scenario: smallest difference in patient outcomes and biggest difference in treatment costs between teclistamab and PomDex

When producing these results, the EAG identified that revision R2 had not previously been fully implemented by the EAG, i.e., the distribution used to model teclistamab TTD had not been changed to the lognormal distribution. This correction affects R2 cost effectiveness results, the EAG preferred base case and EAG scenarios 5 and 6. EAG cost effectiveness results are presented in Table 1 (deterministic) and Table 2 (probabilistic); the latest teclistamab PAS (received 22 May 2024) price has been used to generate these results.

Table 1 EAG deterministic results for teclistamab versus PomDex, PAS price for teclistamab (x 1.2 modifier)

EAG revisions to company base case	Teclistamab		PomDex		Incremental		ICER	NMB*	NMB change
	Cost	QALYs	Cost	QALYs	Cost	QALYs	£/QALY		
A. Company clarification base case†	████	██	████	██	████	██	████████	████	
A1. EAG corrected company clarification base case†	████	██	████	██	████	██	████████	████	████
R1) Attenuate PomDex OS and PFS (mid-point)	████	██	████	██	████	██	████████	████	████
R2) Use lognormal for teclistamab TTD and attenuate TTD for teclistamab and PomDex (mid-point)	████	██	████	██	████	██	████████	████	████
R3) Patients treated with teclistamab switch from a Q1W to a Q2W regimen at 12 months; no patients switch earlier than 12 months	████	██	████	██	████	██	████████	████	████
R4) PomDex utility values equal teclistamab utility values	████	██	████	██	████	██	████████	████	████
R5) Remove AE disutilities	████	██	████	██	████	██	████████	████	████
R6) MajesTEC-1 trial proportion of patients treated with teclistamab receiving subsequent treatment	████	██	████	██	████	██	████████	████	████
R7) UK RW TCE RRMM PomDex cohort study proportion of patients receiving subsequent treatment (both model arms)	████	██	████	██	████	██	████████	████	████
B. EAG preferred base case (R1-R7)	████	██	████	██	████	██	████████	████	████
EAG scenarios									
S1) Attenuate teclistamab and PomDex OS and PFS using clinician lower likely values	████	██	████	██	████	██	████████	████	████
S2) Attenuate teclistamab and PomDex OS and PFS using clinician higher likely values	████	██	████	██	████	██	████████	████	████
S3) Attenuate TTD using clinician lower likely values	████	██	████	██	████	██	████████	████	████
S4) Attenuate TTD using clinician higher likely values	████	██	████	██	████	██	████████	████	████
S5) Teclistamab optimistic scenario (R1-R7)	████	██	████	██	████	██	████████	████	████
S6) Teclistamab pessimistic scenario (R1-R7)	████	██	████	██	████	██	████████	████	████
S7) Requested by NICE: most optimistic scenario (R1-R7)	████	██	████	██	████	██	████████	████	████
S8) Requested by NICE: most pessimistic scenario (R1-R7)	████	██	████	██	████	██	████████	████	████

* Willingness to pay threshold=£30,000/QALY

† Does not include R5, R6 and R7 which were accepted by the company in the company addendum

AE=adverse event; EAG=External Assessment Group; ICER=incremental cost effectiveness ratio; NMB=net monetary benefit; OS=overall survival; PAS=patient access scheme; PFS=progression-free survival; PomDex=pomalidomide plus low-dose dexamethasone; Q1W=every week; Q2W=every 2 weeks; QALY=quality adjusted life year; RW TCE RRMM=real-world triple-class exposed relapsed or refractory multiple myeloma; TTD=time to treatment discontinuation

Table 2 EAG probabilistic cost effectiveness results for teclistamab versus PomDex, PAS price for teclistamab

EAG revisions‡	Teclistamab		PomDex		Incremental		ICER	NMB*	NMB change from base case
	Cost	QALYs	Cost	QALYs	Cost	QALYs (x1.2 multiplier)	£/QALY		
A. Company clarification base case†	████	██	████	██	████	██	██████████	████	
A1. EAG corrected company clarification base†	████	██	████	██	████	██	██████████	████	████
B. EAG preferred base case (R1-R7)	████	██	████	██	████	██	██████████	████	████
S5) Teclistamab optimistic scenario (R1-R7)	████	██	████	██	████	██	██████████	████	████
S6) Teclistamab pessimistic scenario (R1-R7)	████	██	████	██	████	██	██████████	████	████
S7) Requested by NICE: most optimistic scenario (R1-R7)	████	██	████	██	████	██	██████████	████	████
S8) Requested by NICE: most pessimistic scenario (R1-R7)	████	██	████	██	████	██	██████████	████	████

* Willingness to pay threshold=£30,000/QALY

‡ The EAG PSA runs exclude variation of unit costs

† Does not include R5, R6 and R7 which were accepted by the company in the company addendum

EAG=External Assessment Group; ICER=incremental cost effectiveness ratio; NMB=net monetary benefit; OS=overall survival; PAS=Patient Access Scheme; PomDex=pomalidomide plus low-dose dexamethasone PSA=probabilistic sensitivity analysis; QALY=quality adjusted life year