

Comparison of Cost-effectiveness results using APEX trial’s full data set and 1-prior line of therapy data only

In the following section, we present the results comparing two sets of data used in calculating reduction in overall survival associated with Velcade while applying stopping rules and VRS for Initial M-protein criteria.

Two sets of results presented in the table below clearly demonstrate that using either the full database or 1-prior line of therapy only to calculate overall survival reduction has negligible impact on cost-effectiveness results. Detailed calculations and results are provided in the attached excel spreadsheet.

1. Incremental costs are lower < £200 in 1-prior therapy sample than total APEX sample.
2. Incremental QALY is < 0.3 months lower in 1-prior therapy sample than total APEX sample.
3. Cost-effectiveness (CE) differs by < £700 between 1-prior therapy sample and total APEX sample.
4. Applying the VRS rule to either 3 or 4 cycle stopping rule lowers costs without affecting OS and both are below £30,000.
5. Costs are lower with 4-cycle stopping rule than 3-cycle rule while incremental QALY is higher.
6. Therefore, 4-cyle stopping rule with VRS scenario dominants other scenarios in higher inc. OS and lower costs.

Table: Summary of Cost-Effectiveness Results based on M-protein Initial criteria With CR+PR+MR*

APEX Full data set (CR+PR+MR)			
M-Protein Initial	Inc. Cost	Inc. QALY months	ICER (PSA)
3-cycle stopping Rule	£21,733	8.2	£31,994 (£27,406-£40,977)
3-cycle stopping Rule + VRS	£19,177	8.2	£28,231 (£24,275-£35,903)
4-cycle stopping Rule	£22,570	8.4	£32,316 (£28,709-£40,790)
4-cycle stopping Rule + VRS	£19,145	8.4	£27,417 (£23,269-£35,039)
APEX 1-prior line of therapy only (CR+PR+MR)			

M-Protein Initial	Inc. Cost	Inc. QALY months	ICER (PSA)
3-cycle stopping Rule	£21,576	7.9	£32,669 (£28,257-£41,559)
3-cycle stopping Rule + VRS	£19,020	7.9	£28,799 (£24,634-£37,282)
4-cycle stopping Rule	£22,410	8.2	£32,991 (£28,951-£41,855)
4-cycle stopping Rule + VRS	£18,986	8.2	£27,950 (£24,024-£35,513)

** Scenarios that use a CP+PR definition of response within the VRS are not included as they are outside of the terms of the proposed VRS scheme.*