

Table 1: Demographic data and disease characteristics

	Number of patient (percentage)
Gender	
Male	52 (53.1%)
Female	46 (46.9%)
Age at diagnosis (years)	
Range	38 – 87
Median	63.5
Mean	64.3
Ethnicity	
Chinese	39 (39.8%)
Malay	36 (36.7%)
Indian	23 (23.5%)
Immunoglobulin type	
IgG	62 (63.3%)
IgA	24 (24.5%)
IgM	1 (1.0%)
IgD	1 (1.0%)
Light Chain Disease	10 (10.2%)
Target organ damage	
Hypercalcaemia	27 (27.6%)
Mean calcium level (mmol/L)	2.57
Renal impairment	22 (22.4%)
Mean creatinine level (umol/L)	160
Anaemia	68 (69.4%)
Mean haemoglobin level (g/L)	91
Lytic bone lesions	77 (78.6%)
Durie-Salmon Staging System (DSS)	
Stage 1	5 (5.1%)
Stage 2	36 (36.7%)
Stage 3	57 (58.2%)
International Staging System (ISS) (n=37)	
Stage 1	7 (18.9%)
Stage 2	10 (27.0%)
Stage 3	20 (54.1%)

Table 2: Treatment regimens used

	Number of patients (percentage)
Number of agents used	
Doublet therapy	53 (54.1%)
Triplet therapy	45 (45.9%)
Regimens used	
<i>Bortezomib-containing regimens</i>	
BCD	31 (31.6%)
BMP	2 (2.0%)
BD	16 (16.3%)
<i>Thalidomide-containing regimens</i>	
CTD	6 (6.1%)
MTP	6 (6.1%)
TD	28 (28.6%)
<i>Non-novel agent</i>	
MP	9 (9.2%)

CTD – cyclophosphamide, thalidomide, dexamethasone; MTP – melphalan, thalidomide, prednisolone; BCD – bortezomib, cyclophosphamide, dexamethasone; BMP – bortezomib, melphalan, prednisolone; BD – bortezomib, dexamethasone, MP – melphalan, prednisolone, TD – thalidomide, dexamethasone

Table 3: Treatment response

	Number of patient (percentage)		P value
	Less than VGPR (n=51)	At least VGPR (n=47)	
Age group			
Less than 65	24 (46.2%)	28 (53.8%)	0.215
65 and above	27 (58.7%)	19 (41.3%)	
Immunoglobulin type			
IgG	37 (59.7%)	25 (40.3%)	0.094
IgA	11 (45.8%)	13 (54.2%)	
IgM	1 (100.0%)	0 (0.0%)	
IgD	0 (0.0%)	1 (100.0%)	
Light Chain Disease	2 (20.0%)	8 (80.0%)	
Stage (DSS)			
Stage 1	1 (20.0%)	4 (80.0%)	0.122
Stage 2	16 (44.4%)	20 (55.6%)	
Stage 3	34 (59.6%)	23 (40.4%)	
Stage (ISS) (n=37)			
Stage 1	2 (28.6%)	5 (71.4%)	0.438
Stage 2	4 (40.0%)	6 (60.0%)	
Stage 3	11 (55.0%)	9 (45.0%)	
Number of agents used			
Two	32 (60.4%)	21 (39.6%)	0.073
Three	19 (42.2%)	26 (57.8%)	
Regimens			
Bortezomib-containing regimens	18 (36.7%)	31 (63.3%)	0.001
Thalidomide-containing regimens	24 (60.0%)	16 (40.0%)	
Non-novel agent	9 (100.0%)	0 (0.0%)	

Table 4: Mean time to best response

	Mean time to best response (months)	P value
Number of agents used		
Two	7.26+6.354	0.115
Three	5.57+2.901	
Regimens		
Bortezomib-containing regimens	4.91±2.278	0.005
Thalidomide-containing regimens	8.14±7.096	
Non-novel agent	9.01±4.163	

Table 5: Univariate and multivariate analysis of factors affecting overall survival

	No. of patients	Univariate analysis			Multivariate analysis		
		Died	Proportion surviving	P value	Hazard ratio	95% confidence interval	P value
Age							
Less than 65	52	17	0.591	0.023	-	-	-
65 and above	46	27	0.323		1.778	0.844 – 3.744	0.130
Immunoglobulin type							
IgG	62	28	0.420	0.778			
Non-IgG	36	16	0.502				
Stage (DSS)							
Stage 1	5	3	0.000	0.091			
Stage 2	36	10	0.654				
Stage 3	57	31	0.367				
Stage (ISS) (n=37)							
Stage 1	8	1	0.833	0.036			
Stage 2	3	0	1.000				
Stage 3	26	11	0.324				
Number of agents used							
Two	53	30	0.369	0.024	-	-	-
Three	45	14	0.548		0.614	0.302 – 1.250	0.179
Regimens							
Bortezomib-containing regimens	49	16	0.576	<0.001	-	-	-
Thalidomide-containing regimens	40	21	0.424		1.146	0.560 – 2.344	0.709
Non-novel agent	9	7	0.000		1.960	0.645 – 5.955	0.235
Best initial treatment response							
Less than VGPR	50	30	0.297	<0.001	-	-	-
At least VGPR	48	14	0.619		0.385	0.190 – 0.782	0.008
Upfront autologous stem cell transplantation (ASCT)							
No	79	39	0.401	0.039	-	-	-
Yes	19	5	0.666		0.866	0.282 – 2.665	0.802

Table 6: Univariate and multivariate analysis of factors affecting disease progression

	No. of patients	Univariate analysis			Multivariate analysis		
		Progressed	Proportion surviving	P value	Hazard ratio	95% confidence interval	P value
Age							
Less than 65	52	34	0.293	0.133	-	-	-
65 and above	46	39	0.129		1.135	0.646 – 1.996	0.659
Immunoglobulin type							
IgG	62	47	0.173	0.898			
Non-IgG	36	26	0.196				
Stage (DSS)							
Stage 1	5	3	0.300	0.057			
Stage 2	36	23	0.276				
Stage 3	57	47	0.117				
Stage (ISS) (n=37)							
Stage 1	8	4	0.343	0.164			
Stage 2	3	1	0.667				
Stage 3	26	20	0.133				
Number of agents used							
Two	53	44	0.139	0.036	-	-	-
Three	45	29	0.228		0.461	0.270 – 0.787	0.005
Regimens							
Bortezomib-containing regimens	49	35	0.186	0.020	-	-	-
Thalidomide-containing regimens	40	29	0.235		0.534	0.305 – 0.937	0.029
Non-novel agent	9	9	0.000		0.574	0.229 – 1.440	0.237
Best initial treatment response							
Less than VGPR	51	46	0.000	<0.001	-	-	-
At least VGPR	47	27	0.349		0.256	0.148 – 0.444	<0.001
Upfront autologous stem cell transplantation (ASCT)							
No	79	63	0.133	0.002	-	-	-
Yes	19	10	0.387		0.389	0.175 – 0.864	0.020

Table 7: Mean duration to autologous stem cell transplantation

	Number of patients	Mean time to ASCT (months)	P value
Upfront ASCT	19 (19.4%)	9.38±3.728	<0.001
Late ASCT	7 (7.1%)	32.69±25.755	
No ASCT	72 (73.5%)		