

Supplementary Materials

Supplementary Table S1. Distribution of *KIAA1524* genotypes depending on selected demographic, clinical and molecular variables.

Variable	KIAA1524 genotypes			<i>p</i>
	CC	CT	TT	
Sex	47 (73.4%)	14 (21.9%)	3 (4.7%)	0.6965
Men	51 (79.7%)	11 (17.2%)	2 (3.1%)	
Women				
Diagnosis				0.8176
Light chain disease	18 (72%)	6 (24%)	1 (4%)	
MM with a monoclonal compo- nent, Non-secretory MM,	80 (77.7%)	19 (18.4%)	4 (3.9%)	
plasmacytoma				
Monoclonal protein class				0.5337
IgA	25 (73.5%)	8 (23.5%)	1 (2.9%)	
IgG	56 (78.9%)	11 (15.5%)	4 (5.6%)	
<i>No data: n=23</i>				
Light chain type				0.5284
Lambda	36 (76.6%)	8 (17%)	3 (6.4%)	
Kappa	62 (77.5%)	16 (20%)	2 (2.5%)	
<i>No data: n=1</i>				
Durie Salmon stage				0.6962
III	89 (76.7%)	23 (19.8%)	4 (3.4%)	
I, II	9 (75%)	2 (16.7%)	1 (8.3%)	
ISS stage				0.3560
3	41 (70.7%)	14 (24.1%)	3 (5.2%)	
1, 2	57 (81.4%)	11 (15.7%)	2 (2.9%)	
Renal function				0.5351
B	19 (73.1%)	5 (19.2%)	2 (7.7%)	
A	79 (77.5%)	20 (19.6%)	3 (2.9%)	
Stage of chronic kidney disease				0.1113
G3a/G3b/G4/G5D	34 (66.7%)	14 (27.5%)	3 (5.9%)	
G1/G2	55 (83.3%)	9 (13.6%)	2 (3.0%)	
Body weight loss before treatment				0.6291
Yes	24 (75%)	6 (18.8%)	2 (6.2%)	
No	11 (78.6%)	3 (21.4%)	0 (0%)	
<i>No data: n=35</i>				

Anaemia grade before treatment					
(WHO)	52 (80%)	12 (18.5%)	1 (1.5%)	0.3368	
Absent or I°	46 (73%)	13 (20.6%)	4 (6.3%)		
II°, III° or IV°					
Haemoglobin	83 (75.5%)	22 (20%)	5 (4.5%)	0.5970	
Low	15 (83.3%)	3 (16.7%)	0 (0%)		
Normal					
Platelets	47 (73.4%)	14 (21.9%)	3 (4.7%)	0.6965	
Low	51 (79.7%)	11 (17.2%)	2 (3.1%)		
Normal					
Albumins	36 (75%)	10 (20.8%)	2 (4.2%)	0.9491	
Low	62 (77.5%)	15 (18.8%)	3 (3.7%)		
Normal					
CRP	33 (75%)	8 (18.2%)	3 (6.8%)	0.4632	
High	65 (77.4%)	17 (20.2%)	2 (2.4%)		
Normal					
LDH	18 (78.3%)	5 (21.7%)	0 (0%)	0.5555	
High	80 (76.2%)	20 (19%)	5 (4.8%)		
Normal					
Calcium	20 (64.5%)	10 (32.3%)	1 (3.2%)	0.1215	
High	78 (80.4%)	15 (15.5%)	4 (4.1%)		
Normal					
B2M	87 (76.3%)	23 (20.2%)	4 (3.5%)	0.7221	
High	11 (78.6%)	2 (14.3%)	1 (7.1%)		
Normal					
Creatinine	36 (70.6%)	13 (25.5%)	2 (3.9%)	0.3797	
High	62 (80.5%)	12 (15.6%)	3 (3.9%)		
Normal					
eGFR	64 (74.4%)	17 (19.8%)	5 (5.8%)	0.2716	
Low	34 (81%)	8 (19%)	0 (0%)		
Normal					
del 17p/TP53				0.8133	
Absent	50 (76.9%)	11 (16.9%)	4 (6.2%)		
Present	16 (72.7%)	5 (22.7%)	1 (4.5%)		
<i>No data: n=41</i>					
t(4;14) IGH/FGFR3	60 (80%)	13 (17.3%)	2 (2.7%)	0.0095*	
Absent	7 (53.8%)	3 (23.1%)	3 (23.1%)		
Present					

<i>No data: n=40</i>					
t(14;16) IGH/MAF					
Absent	63 (76.8%)	14 (17.1%)	5 (6.1%)	0.5340	
Present	4 (66.7%)	2 (33.3%)	0 (0%)		
<i>No data: n=40</i>					
t(11;14) IGH/CCND1					
Absent	67 (77%)	16 (18.4%)	4 (4.6%)	0.8146	
Present	8 (72.7%)	2 (18.2%)	1 (9.1%)		
<i>No data: n=30</i>					
Other IGH rearrangement					
Absent	64 (76.2%)	16 (19%)	4 (4.8%)	0.8649	
Present	11 (78.6%)	2 (14.3%)	1 (7.1%)		
<i>No data: n=30</i>					
amp 1q21/ CKS1B					
Absent	8 (72.7%)	2 (18.2%)	1 (9.1%)	0.4134	
Present	11 (91.7%)	1 (8.3%)	0 (0%)		
<i>No data: n=105</i>					

Supplementary Table S2. Chemotherapy response depending on selected demographic, clinical and molecular variables.

Variable	2 nd cycle [n=122]		OR [95%CI] <i>p</i>	4 th cycle [n=110]		OR [95%CI] <i>p</i>	6 th cycle [n=98]		OR [95%CI] <i>p</i>	8 th cycle [n=38]		OR [95%CI] <i>p</i>
	No response	Response		No response	Response		No response	Response		No response	Response	
Sex			1.39			6.36			2.38			1.46
Men	8 (9.8%)	55 (90.2%)	[0.44-4.25]	6 (10.7%)	50 (89.3%)	[0.74-54.71]	4 (8.7%)	42 (9.13%)	[0.41-13.65]	3 (18.8%)	13 (81.2%)	[0.25-8.40]
Women	6 (13.1%)	53 (86.9%)	0.5711	1 (1.9%)	53 (98.1%)	0.0920	2 (3.8%)	50 (96.2%)	0.3302	3 (13.6%)	19 (86.4%)	0.6706
Age			0.86			0.62			0.81			2.27
≥65	7 (10.8%)	58 (89.2%)	[0.28-2.62]	3 (5.1%)	56 (94.9%)	[0.13-2.95]	3 (5.6%)	51 (94.4%)	[0.15-4.19]	5 (18.5%)	22 (81.5%)	[0.23-22.07]
<65	7 (12.3%)	50 (87.7%)	0.7940	4 (7.8%)	47 (92.2%)	0.5574	3 (6.8%)	41 (93.2%)	0.7957	1 (9.1%)	10 (90.9%)	0.4791
Diagnosis	12 (12%)	88 (88%)	1.23	7 (7.5%)	86 (92.5%)	2.86		78 (94%)	2.03	5 (16.1%)	26 (83.9%)	1.15

IgG or IgA Light chain disease <i>N/A: n=2</i>	2 (10%)	18 (90%)	[0.25-5.96] 0.7995	0 (0%)	16 (100%)	[0.15-52.56] 0.4790	5 (6%) 0 (0%)	14 (100%)	[0.11-38.77] 0.6375	1 (14.3%)	6 (85.7%)	[0.11-11.78] 0.9039
Monoclonal protein class			2.18			2.74			0.59			0.20
IgG	10 (13.9%)	62 (86.1%)	[0.45-10.61]	6 (9.2%)	59 (90.8%)	[0.31-23.94]	3 (5.1%)	56 (94.9%)	[0.09-3.77]	2 (9.1%)	20 (90.9%)	[0.03-1.49]
IgA <i>N/A: n=27</i>	2 (6.9%)	27 (93.1%)	0.3356	1 (3.6%)	27 (96.4%)	0.3606	2 (8.3%)	22 (91.7%)	0.5765	3 (33.3%)	6 (66.7%)	0.1163
Light chain type			1.00			2.67			3.10			0.83
Lambda	5 (11.6%)	38 (88.4%)	[0.31-3.23]	4 (10.5%)	34 (89.5%)	[0.56-12.60]	3 (9.1%)	30 (90.9%)	[0.49-19.55]	2 (14.3%)	12 (85.7%)	[0.13-5.26]
Kappa <i>N/A: n=1</i>	9 (11.5%)	69 (88.5%)	0.9883	3 (4.2%)	68 (95.8%)	0.2156	2 (3.1%)	62 (96.9%)	0.2285	4 (16.7%)	20 (83.3%)	0.8462
Durie Salmon stage			1.05			0.72			0.67			1.05
III	11 (11.6%)	84 (88.4%)	[0.27-4.06]	5 (5.9%)	80 (94.1%)	[0.13-3.95]	4 (5.5%)	69 (94.5%)	[0.11-3.88]	4 (16%)	21 (84%)	[0.16-6.64]
I, II	3 (11.1%)	24 (88.9%)	0.9463	2 (8%)	23 (92%)	0.7041	2 (8%)	23 (92%)	0.6519	2 (15.4%)	11 (84.6%)	0.9606
ISS stage			1.87			1.01			1.36			1.28
3	8 (15.1%)	45 (84.9%)	[0.61-5.75]	0 (0%)	4 (100%)	[0.21-4.72]	0 (0%)	2 (100%)	[0.26-7.10]	0 (0%)	1 (100%)	[0.22-7.37]
1, 2	6 (8.7%)	63 (91.3%)	0.2771	1 (5.6%)	17 (94.4%)	0.9943	3 (20%)	12 (80%)	0.7161	1 (25%)	3 (75%)	0.7779
Renal function	4 (17.4%)	19 (82.6%)	1.87	2 (9.5%)	19 (90.5%)	1.77	1 (5.6%)	17 (94.4%)	0.88	3 (33.3%)	6 (66.7%)	4.33

B	10 (10.1%)	89 (89.9%)	[0.53-6.61]	5 (5.6%)	84 (94.4%)	[0.32-9.81]	5 (6.2%)	75 (93.7%)	[0.09-8.05]	3 (10.3%)	26 (89.7%)	[0.69-27.01]
A			0.3290			0.5144			0.9116			0.1163
Stage of chronic kidney disease			1.08			0.55			1.45			5.71
G3a/G3b/G4/G5D	6 (13%)	40 (87%)	[0.35-3.37]	2 (4.9%)	39 (95.1%)	[0.10-3.00]	2 (5.4%)	35 (94.6%)	[0.19-10.84]	5 (26.3%)	14 (73.7%)	[0.59-54.96]
G1/G2	8 (12.1%)	58 (87.9%)	0.8846	5 (8.5%)	54 (91.5%)	0.4934	2 (3.8%)	51 (96.2%)	0.7131	1 (5.9%)	16 (94.1%)	0.1313
<i>N/A: n=11</i>												
Performance status			3.95			1.41			0.52			0.78
2-4	11 (17.5%)	52 (82.5%)	[1.04-14.95]	4 (7.4%)	50 (92.6%)	[0.30-6.63]	2 (4.3%)	45 (95.7%)	[0.09-2.99]	3 (14.3%)	18 (85.7%)	[0.13-4.59]
0, 1	3 (5.1%)	56 (94.9%)	0.0432*	3 (5.4%)	53(94.6%)	0.6610	4 (7.8%)	47 (92.2%)	0.4658	3 (17.6%)	14 (82.4%)	0.7779
Treatment protocol (1)			5.35			3.31			0.31			0.60
CTD	7 (29.2%)	17 (70.8%)	[1.66-17.22]	3 (13.6%)	19 (86.4%)	[0.68-16.05]	0 (0%)	18 (100%)	[0.02-5.75]	1 (11.1%)	8 (88.9%)	[0.06-5.93]
V(C)D, VTD	7 (7.1%)	91 (92.9%)	0.0049*	4 (4.5%)	84 (95.5%)	0.1364	6 (7.5%)	74 (92.5%)	0.4317	5 (17.2%)	24 (82.8%)	0.6621
Treatment protocol (2)			0.05			0.26			1.79			1.08
VTD	0 (0%)	42 (100%)	[0.003-0.93]	1 (2.4%)	40 (97.6%)	[0.03-2.26]	3 (8.3%)	33 (91.7%)	[0.34-9.36]	1 (16.7%)	5 (83.3%)	[0.10-11.32]
CTD, V(C)D	14 (17.5%)	66 (82.5%)	0.0443*	6 (8.7%)	63 (91.3%)	0.2235	3 (4.8%)	59 (95.2%)	0.4917	5 (15.6%)	27 (84.4%)	0.9488
Body weight loss before treatment	6 (14%)	37 (86%)	0.77	4 (10.5%)	37 (94.9%)	2.18	1 (3%)	32 (97%)	0.56	2 (15.4%)	11 (84.6%)	0.79
	8 (17.4%)	38 (82.6%)	[0.24-2.43]	2 (5.1%)	32 (89.5%)	[0.37-12.65]	2 (5.3%)	36 (94.7%)	[0.05-6.50]	3 (18.8%)	13 (81.2%)	[0.11-5.60]

Yes			0.6568			0.3865			0.6449			0.8117
No												
N/A: n=35												
Anaemia before treatment (WHO)			7.13			3.24			1.05			0.33
			[0.41-124.23]			[0.18-59.37]			[0.11-9.63]			[0.02-4.40]
Yes	14 (13.9%)	87 (86.1%)	0.1781	7 (7.6%)	85 (92.5%)	0.4273	5 (6.2%)	76 (93.8%)	0.9638	5 (14.3%)	30 (85.7%)	0.4040
No	0 (0%)	21 (100%)		0 (0%)	18 (100%)		1 (5.9%)	16 (94.1%)		1 (33.3%)	2 (66.7%)	
Platelets			1.33			1.15			9.22			7.50
			[0.26-6.69]			[0.13-10.37]			[1.61-52.64]			[0.81-69.08]
Low	2 (14.3%)	12 (85.7%)		1 (7.1%)	13 (92.9%)		3 (25%)	9 (75%)		2 (50%)	2 (50%)	
Normal	12 (11.1%)	96 (88.9%)	0.7266	6 (6.2%)	90 (93.7%)	0.8983	3 (3.5%)	83 (96.5%)	0.0124*	4 (11.8%)	30 (88.2%)	0.0753
Albumins			2.56			1.52			0.39			2.20
			[0.83-7.92]			[0.32-7.19]			[0.04-3.52]			[0.38-12.87]
Low	8 (17.8%)	37 (82.2%)		3 (8.1%)	34 (91.9%)		1 (3.1%)	61 (96.9%)		3 (23.1%)	10 (76.9%)	
Normal	6 (7.8%)	71 (92.2%)	0.1034	4 (5.5%)	69 (94.5%)	0.5958	5 (7.6%)	31 (92.4%)	0.4040	3 (12%)	22 (88%)	0.3816
CRP			3.32			6.70			0.57			0.44
			[1.06-10.33]			[1.23-36.52]			[0.06-5.09]			[0.04-4.27]
High	8 (20.5%)	31 (79.5%)		5 (15.2%)	28 (84.8%)		1 (4%)	24 (96%)		1 (9.1%)	10 (90.9%)	
Normal	6 (7.2%)	77 (92.8%)	0.0391*	2 (2.6%)	75 (97.4%)	0.0280*	5 (6.8%)	68 (93.2%)	0.6123	5 (18.5%)	22 (81.5%)	0.4791
LDH			1.47			0.66			2.87			0.94
			[0.29-7.43]			[0.03-12.54]			[0.29-28.62]			[0.04-21.95]
High	2 (15.4%)	11 (84.6%)		0 (0%)	9 (100%)		1 (14.3%)	6 (85.7%)		0 (0%)	2 (100%)	
Normal	12 (11%)	97 (89%)	0.6416	7 (6.9%)	94 (93.1%)	0.7842	5 (5.5%)	86 (94.5%)	0.3697	6 (16.7%)	30 (83.3%)	0.9685
Calcium	5 (16.7%)	25 (83.3%)	1.84	1 (3.7%)	26 (96.3%)	0.49	3 (13.6%)	19 (86.4%)	3.84	1 (10%)	9 (90%)	0.51
			[0.57-6.01]			[0.06-4.29]			[0.72-20.57]			[0.05-5.00]
High	9 (9.8%)	83 (90.2%)		6 (7.2%)	77 (92.8%)		3 (3.9%)	73 (96.1%)		5 (17.9%)	23 (82.1%)	

Normal			0.3097			0.5224			0.1159			0.5642
B2M			0.75			0.33			0.75			0.33
High	12 (14.3%)	96 (85.7%)	[0.15-3.76]	5 (14.3%)	91 (94.8%)	[0.06-1.89]	5 (5.9%)	80 (94.1%)	[0.08-6.98]	5 (14.3%)	30 (85.7%)	[0.02-4.40]
Normal	2 (11.1%)	12 (88.9%)	0.7266	2 (5.2%)	12 (85.7%)	0.2131	1 (7.7%)	12 (92.3%)	0.8005	1 (33.3%)	2 (66.7%)	0.4040
Creatinine			1.33			0.71		32 (97%)	0.37			3.33
High	6 (13.3%)	39 (86.7%)	[0.43-4.10]	2 (5.1%)	37 (94.9%)	[0.13-3.86]	1 (3%)	60 (92.3%)	[0.04-3.35]	4 (25%)	12 (75%)	[0.53-21.03]
Normal	8 (10.4%)	69 (89.6%)	0.6234	5 (7%)	66 (93%)	0.6952	5 (7.7%)		0.3799	2 (9.1%)	20 (90.9%)	0.2002
eGFR			0.94			1.29			0.97			3.82
Low	9 (11.3%)	71 (88.7%)	[0.29-3.00]	5 (6.8%)	68 (93.2%)	[0.24-6.97]	4 (6.1%)	62 (93.9%)	[0.17-5.58]	6 (19.4%)	25 (80.6%)	[0.19-75.99]
Normal	5 (11.9%)	37 (88.1%)	0.9142	2 (5.4%)	35 (94.6%)	0.7699	2 (6.3%)	30 (93.7%)	0.9707	0 (0%)	7 (100%)	0.3792
del 17p/TP53			0.21			2.03			12.46			0.62
Present	0 (0%)	21 (100%)	[0.01-3.87]	2 (9.5%)	19 (90.5%)	[0.32-13.11]	3 (18.8%)	13 (81.2%)	[1.20-129.73]	1 (14.3%)	6 (85.7%)	[0.06-6.80]
Absent	6 (9.4%)	58 (90.6%)	0.2936	3 (4.9%)	58 (95.1%)	0.4547	1 (1.8%)	54 (98.2%)	0.0348*	4 (21.1%)	15 (78.9%)	0.6996
<i>No data: n=41</i>												
t(4;14) IGH/FGFR3			1.25			5.11			2.18			2.37
Present	1 (8.3%)	11 (91.7%)	[0.13-11.77]	2 (18.2%)	9 (81.8%)	[0.75-34.84]	1 (10%)	9 (90.%)	[0.20-23.36]	1 (33.3%)	2 (66.7%)	[0.17-33.00]
Absent	5 (6.8%)	69 (93.2%)	0.8427	3 (4.2%)	69 (95.8%)	0.0957	3 (4.8%)	59 (95.2%)	0.5179	4 (17.4%)	19 (82.6%)	0.5194
<i>No data: n=40</i>												
t(11;14) IGH/CCND1	2 (18.2%)	9 (81.8%)	2.92	2 (20%)	8 (80%)	6.42	4 (44.4%)	5 (55.6%)	55.20	2 (66.7%)	1 (33.3%)	16.00
	6 (7.1%)	79 (92.9%)	[0.51-16.71]	3 (3.7%)	77 (96.2%)	[0.93-44.28]	1 (1.4%)	69 (98.6%)	[5.15-591.63]	3 (11.1%)	24 (88.9%)	[1.09-234.26]

Present			0.2272			0.0593 [‡]			0.0009*			0.0429*
Absent												
<i>No data: n=30</i>												
t(14;16)												
IGH/MAF			2.03			3.04			2.64			0.85
<u>Present</u>	0 (0%)	2 (100%)	[0.09-45.96]	0 (0%)	2 (100%)	[0.13-71.33]	0 (0%)	2 (100%)	[0.11-62.00]	0 (0%)	2 (100%)	[0.03-20.45]
<u>Absent</u>	8 (8.5%)	86 (91.5%)	0.6550	5 (5.7%)	83 (94.3%)	0.4904	5 (6.5%)	72 (93.5%)	0.5474	5 (17.9%)	23 (82.1%)	0.9227
<i>No data: n=30</i>												
Other IGH rearrangement			0.82			0.45			0.41			3.50
Present	1 (7.1%)	13 (92.9%)	[0.09-7.26]	0 (0%)	14 (100%)	[0.02-8.56]	0 (0%)	13 (100%)	[0.02-7.94]	2 (33.3%)	4 (66.7%)	[0.43-28.14]
Absent	7 (8.5%)	75 (91.5%)	0.8618	5 (6.6%)	71 (93.4%)	0.5939	5 (7.6%)	61 (92.4%)	0.5587	3 (12.5%)	21 (87.5%)	0.2388
<i>No data: n=30</i>												
Amp 1q21/CKS1B						2.28			1.11			0.04
Present	0 (0%)	13 (100%)	N/d	1 (7.7%)	12 (92.3%)	[0.08-62.44]	2 (18.2%)	9 (81.8%)	[0.08-15.53]	0 (0%)	4 (100%)	[0.0004-2.83]
Absent	0 (0%)	9 (100%)		0 (0%)	9 (100%)	0.6255	1 (16.7%)	5 (83.3%)	0.9376	1 (100%)	0 (0%)	0.1361
<i>No data: n=105</i>												
KIAA1524 genotype			0.23			0.34			0.24			0.56
(686G>A,	7 (7.4%)	88 (92.6%)	[0.07-0.72]	4 (4.7%)	82 (95.3%)	[0.07-1.64]	3 (3.9%)	74 (96.1%)	[0.04-1.31]	4 (13.8%)	25 (86.2%)	[0.08-3.72]
rs2278911)	7 (25.9%)	20 (74.1%)	0.0119*	3 (12.5%)	21 (87.5%)	0.1803	3 (14.3%)	18 (85.7%)	0.0993	2 (22.2%)	7 (77.8%)	0.5483

CC												
CT r CT												
KIAA1524 genotype (686G>A, rs2278911)		2 (50%)	8.33 [1.14-68.54]		2 (50%)	20.20 [2.34-174.44]			9.00 [0.69-116.87]			6.20 [0.33-115.92]
TT	2 (50%)	106	0.0372*	2 (50%)	101	0.0063*	1 (33.3%)	2 (66.7%)	0.0930	1 (50%)	1 (50%)	0.2220
CC r CT	12 (10.2%)	(89.8%)		5 (4.7%)	(95.3%)		5 (5.3%)	90 (94.7%)		5 (13.9%)	31 (86.1%)	

Abbreviations: B2M – beta-2-microglobulin, CI – confidence interval, CRP – C-reactive protein, eGFR – estimated glomerular filtration rate, ISS - Multiple Myeloma International Staging System, LDH - lactate dehydrogenase, *Me* – median, N/d – not determined, OR – odds ratio, *p* - statistical significance, WHO -World Health Organization. * - statistically significant result, # - a trend toward significance.

Supplementary Table S3. Survival of MM patients depending on selected demographic, clinical and molecular variables.

Variable	Progression free survival			Overall survival		
	Univariable		Multivariable	Univariable		Multivariable
	mPFS (months)	HR (95% CI)	HR (95% CI)	mOS (months)	HR (95% CI)	HR (95% CI)
	25	<i>p</i>	<i>p</i>	43	<i>p</i>	<i>p</i>
Sex						
Men	25	1.65 (1.03-2.63)	1.73 (0.91-3.27)	34	1.35 (0.77-2.36)	1.46 (0.65-3.27)
Women	27	0.0325*	0.0956	46	0.2889	0.3613
Age						
≥65	17	1.49 (0.34-2.38)	0.72 (0.33-1.54)	38	1.35 (0.77-2.36)	0.89 (0.40-2.02)
<65	30	0.0930	0.3949	45	0.3056	0.7908
Diagnosis						
Light chain disease	24	1.03 (0.55-1.95)	0.92 (0.40-2.13)	28	2.37 (1.04-5.40)	3.52 (1.45-8.55)
IgA, IgG	25	0.9168	0.8554	47	0.0057*	0.0056*
N/A: n=2						
Monoclonal protein class						
IgA	24	1.02 (0.58-1.79)	1.38 (0.62-3.09)	45	1.44 (0.70-2.98)	0.55 (0.20-1.46)
IgG	25	0.9432	0.4294	47	0.2841	0.2313
N/A: n=27						
Light chain type						
Lambda	17	1.27 (0.77-2.09)	1.41 (0.76-2.62)	33	1.63 (0.89-3.00)	1.09 (0.47-2.48)
Kappa	27	0.3169	0.2821	43	0.0825	0.8450
No data: n=1						
Durie-Salmon stage						
III	25	0.84 (0.47-1.49)	0.50 (0.20-1.25)	41	1.07 (0.54-2.11)	0.79 (0.24-2.60)
I, II	17	0.5241	0.1423	45	0.8492	0.6963
ISS stage						
3	17	1.74 (1.08-2.82)	1.16 (0.58-2.31)	34	2.03 (1.13-3.65)	2.11 (1.20-3.73)
1, 2	34	0.0153*	0.6704	45	0.0099*	0.0101*
Renal function						
B	24	1.24 (0.68-2.24)	0.69 (0.31-1.57)	28	1.36 (0.65-2.85)	0.61 (0.22-1.71)
A	25	0.4431	0.3847	43	0.3572	0.3539
Stage of chronic kidney disease						
G3a/G3b/G4/G5D	17	1.85 (0.12-3.06)	1.21 (0.58-2.53)	43	1.78 (0.99-3.20)	0.85 (0.35-2.01)
G1/G2	34	0.0092*	0.6126	NR	0.0436*	0.7071
N/A: n=11						
Performance status						
2-4	17	1.60 (1.01-2.55)	0.85 (0.42-1.73)	33	2.01 (1.15-3.53)	2.19 (0.98-4.88)
0, 1	34	0.0479*	0.6504	47	0.0144*	0.0566 [#]
Treatment protocol (1)						
CTD	24	1.18 (0.69-2.03)	0.94 (0.45-1.95)	33	0.95 (0.52-1.73)	1.24 (0.48-3.22)
V(C)D, VTD	25	0.5006	0.8662	41	0.8488	0.6646
Treatment protocol (2)						
VTD	36	0.56 (0.34-0.92)	0.96 (0.44-2.10)	34	1.08 (0.58-2.01)	1.29 (0.50-3.35)
CTD, V(C)D	18	0.0352*	0.9143	47	0.7904	0.6043
AHSCT						
Yes	42	0.37 (0.23-0.59)	0.48 (0.25-0.93)	45	0.53 (0.30-0.93)	0.88 (0.36-2.22)
No	16	0.0002*	0.0308*	38	0.0386*	0.7937

Body weight loss before treatment	18	1.46 (0.87-2.45)	1,18 (0,55-2,52)	33	1.36 (0.73-2.52)	1.55 (0.63-3.83)
Yes	34	0.1471	0,6672	46	0.3181	0.3412
No						
<i>No data: n=35</i>						
Anaemia before treatment (WHO)	24	2.40 (1.35-4.26)	1,46 (0,54-4,00)	47	2.43 (1.28-4.63)	3.29 (0.94-11.94)
Yes	NR	0.0196*	0,4593	33	0.0280*	0.0722
No						
Platelets	10	2.08 (0.95-4.56)	3.07 (1.41-6.71)	24	1.54 (0.67-3.58)	2.21 (0.81-6.06)
Low	26	0.0127*	0.0051*	43	0.2288	0.1249
Normal						
Albumins	14	2.29 (1.37-3.84)	1.50 (0.79-2.83)	30	2.28 (1.22-4.26)	4.08 (1.71-9.77)
Low	34	0.0002*	0.2186	47	0.0023*	0.0016*
Normal						
CRP	24	1.29 (0.78-2.13)	0.88 (0.42-1.82)	38	1.42 (0.77-2.64)	2.14 (0.83-5.52)
High	26	0.2929	0.7343	46	0.2265	0.1159
Normal						
LDH	12	1.95 (0.85-4.48)	2.59 (1.01-6.62)	22	1.79 (0.66-4.88)	2.11 (0.59-7.55)
High	25	0.0344*	0.0487*	43	0.1442	0.2534
Normal						
Calcium	24	1.36 (0.78-2.37)	1.71 (0.83-3.54)	28	1.63 (0.82-3.22)	1.30 (0.54-3.17)
High	25	0.2350	0.1464	46	0.1094	0.5589
Normal						
B2M	25	2.58 (1.37-4.84)	1.28 (0.43-3.81)	34	2.73 (1.35-5.53)	1.47 (0.40-5.36)
High	NR	0.0278*	0.6562	52	0.0373*	0.5639
Normal						
Creatinine	17	1.64 (1.01-2.68)	1.09 (0.54-2.18)	34	1.74 (0.97-3.13)	1.38 (0.59-3.22)
High	30	0.0315*	0.8135	47	0.0466*	0.4638
Normal						
eGFR	24	1.44 (0.88-2.36)	0.59 (0.28-1.27)	38	1.30 (0.72-2.37)	1.59 (0.62-4.08)
Low	39	0.1735	0.1808	45	0.4037	0.3394
Normal						
del 17p/TP53						
Present	15	1.84 (0.92-3.66)	2.25 (1.17-4.31)	30	1.68 (0.65-4.29)	1.31 (0.51-3.39)
Absent	25	0.0391*	0.0150*	46	0.1956	0.5784
<i>No data: n=41</i>						
t(4;14) IGH/FGFR3						
Present	17	1.42 (0.60-3.36)	1.07 (0.45-2.53)	22	2.62 (0.81-8.46)	3.22 (1.20-8.63)
Absent	25	0.3540	0.8731	45	0.0190*	0.0206*
<i>No data: n=40</i>						
t(11;14) IGH/CCND1						
Present	9	2.49 (0.85-7.35)	2.34 (0.99-5.51)	45	1.18 (0.39-3.61)	0.55 (0.11-2.70)
Absent	25	0.0119*	0.0537*	46	0.7491	0.4620
<i>No data: n=30</i>						
t(14;16) IGH/MAF						
Present	9	1.30 (0.14-12.23)	1.56 (0.21-11.80)	28	1.89 (0.13-28.23)	6.64 (0.76-57.95)
Absent	25	0.7924	0.6657	46	0.5172	0.0883
<i>No data: n=30</i>						
Other IGH rearrangement						
Present	17	1.13 (0.53-2.38)	1.06 (0.46-2.44)	NR	1.19 (0.43-3.28)	0.93 (0.32-2.71)
Absent	25	0.7374	0.8890	45	0.7157	0.8994

<i>No data: n=30</i>						
amp 1q21/CKS1B						
Present	14	1.20 (0.38-3.73)	0.73 (0.13-4.03)	NR	1.05 (0.18-6.21)	N/a
Absent	25	0.7509	0.7202	NR	0.9605	0,9761
<i>No data: n=105</i>						
KIAA1524 genotype						
(686G>A, rs2278911)	27	0.40 (0.22-0.74)	0.53 (0.28-1.00)	46	0.41 (0.19-0.85)	0.55 (0.24-1.25)
CC	12	0.0001*	0.0542*	24	0.0016*	0.1563
CT or TT						
KIAA1524 genotype						
(686G>A, rs2278911)	6	4.67 (0.73-29.93)	7.57 (2.54-22.61)	8	4.39 (0.59-32.61)	6.89 (1.95-24.40)
TT	25	0.0002*	0.0003*	45	0.0017*	0.0029*
CC or CT						

Abbreviations: B2M – beta-2-microglobulin, CI – confidence interval, CRP – C-reactive protein, eGFR – estimated glomerular filtration rate, HR – hazard ratio, ISS - Multiple Myeloma International Staging System, LDH - lactate dehydrogenase, mOS – median overall survival, N/d – not determined, NR- not reached, *p* - statistical significance, WHO -World Health Organization. * - statistically significant result, # - trend toward significance,