

Supplementary materials

Table S1. Comparison of the *miR-8074* expression depending on demographic, clinical and molecular factors.

Variable	<i>miR-8074</i>	<i>P</i>
	<i>Me</i>	
	0.88	
Sex		
Men	0.69	0.4788
Women	2.02	
Age		
<65	2.08	0.8677
≥65	0.79	
Diagnosis		
MM with a monoclonal component	1.42	0.7774
Light chain disease	0.54	
Monoclonal protein class		
IgA	3.11	0.3803
IgG	0.79	
Light chain type		
Kappa	0.63	0.2926
Lambda	2.13	
<i>No data: n=1</i>		
Durie-Salmon stage		
I	2.80	0.4108
II	2.36	
III	0.57	
ISS stage		
1	0.49	0.8241
2	1.80	
3	1.26	
<i>No data: n=1</i>		
Renal function		
A - creatinine < 2 mg/dL	1.59	0.7306
B - creatinine ≥ 2 mg/dL	0.55	
Performance status		
0	0.39	0.4151
1	0.41	
2	1.95	
3	4.36	
4	6.26	
Body weight loss		
No	0.46	0.3425
Yes	1.78	
<i>No data: n=20</i>		
5%	2.06	0.3121
10%	0.59	
Anemia grade (WHO)		
Absent or I°	0.26	0.2266
II°, III° or IV°	1.60	
Treatment protocol		
CTD	1.61	0.5759
	0.72	

V(C)D	1.88	
VTD		
del (17p)		
Absent	0.84	0.5085
Present	0.41	
No data: n=20		
t(4;14)		
Absent	0.81	0.9674
Present	0.52	
No data: n=20		
t(14;16)	0.75	
Absent	1.61	-
Present		
No data: n=20		
t(11;14)		
Absent	1.42	0.2971
Present	0.20	
No data: n=20		
Other IgH gene rearrangement		
Absent	0.64	0.9173
Present	1.88	
No data: n=20		

CTD - cyclophosphamide, thalidomide, dexamethasone; ISS - Multiple Myeloma International Staging System; *Me* – median, *p* - statistical significance, WHO - World Health Organization; V(C)D - bortezomib, (cyclophosphamide), dexamethasone; VTD - bortezomib, thalidomide, dexamethasone.

Table S2. Spearman's rank correlation between selected demographic, clinical and molecular variables and *miR-8074* expression.

Variable	<i>miR-8074</i> expression	
	rho	P
Age [years]	0.0421	0.6701
Serum monoclonal protein (g/dl)	0.112	0.6286
Serum light chain (mg/l)	0.161	0.4743
Durie-Salmon stage	-0.128	0.1940
ISS stage	0.0260	0.7930
Kidney disease A/B	-0.121	0.2190
Performance status	0.189	0.0583
BMI	0.0172	0.8852
Weight loss [%]	0.104	0.3455
Haemoglobin [g/dl]	-0.114	0.2483
Anaemia grade (WHO)	0.119	0.2283
Lymphocytes [K/ul]	0.0753	0.4452
Neutrophils [K/ul]	-0.0319	0.7469
Neutrophil to lymphocyte ratio	-0.0694	0.4839
Platelets [K/ul]	0.0557	0.5722
MPV [fl]	-0.102	0.2992
Number of lytic foci in the bones	-0.0757	0.4449
eGFR [mL/min/1.73m ²]	0.0838	0.3974
Stage of chronic kidney disease	-0.121	0.2190
Albumins [mg/dl]	-0.159	0.1045

Creatinine [mg/dl]	-0.0860	0.3832
B2M [ng/l]	0.0502	0.6144
LDH [IU/l]	-0.0389	0.7049
Calcium [mmol/l]	-0.0172	0.8619
CRP [mg/l]	0.0352	0.7231
del (17p) [% cell.]	-0.0721	0.4169
t(4;14) [% cell.]	-0.00447	0.9537
t(14;16) [% cell.]	-0.114	0.8235
t(11;14) [% cell.]	-0.114	0.2018
Other IgH gene rearrangement [% cell.]	-0.0113	0.8937

auto HSCT - autologous hematopoietic stem cell transplant, B2M – beta-2-microglobulin, , CRP – C-reactive protein, eGFR – estimated glomerular filtration rate, ISS - Multiple Myeloma International Staging System, LDH - lactate dehydrogenase, MPV – mean platelet volume, *p* - statistical significance, rho- Spearman's rank correlation coefficient, WHO - World Health Organization.

Table S3. Comparison and assessment of the usefulness of the *miRNA-8074* expression level in differentiating CTH responses.

Variable	<i>miRNA-8074</i> expression						<i>p</i> ^b
	<i>Me</i>	<i>p</i> ^a	cut-off	Sensitivity	Specificity	AUC (95%CI)	
Response after 2 cycle of CTH	0.79	0.5511	> 0.539	71.43%	48.84%	0.550 (0.45-0.65)	0.5229
No	3.08						
Yes							
Response after 4 cycle of CTH	0.66	0.3918	> 0.539	85.71%	50.00%	0.598 (0.49-0.70)	0.2285
No	1.26						
Yes							
Response after 6 cycle of CTH	0.79	0.5568	> 0.108	100.00%	35.53%	0.572 (0.46-0.68)	0.5172
No	0.56						
Yes							
Response after 8 cycle of CTH	1.61	0.7359	> 0.078	100.00%	33.33%	0.548 (0.36-0.72)	0.7149
No	0.72						
Yes							

AUC – area under curve, CI – confidence interval, CTH – chemotherapy, *Me* -median, *p* - statistical significance.

Response: CR= complete response, VGPR = very good partial response, PR = partial response, MR = minimal response; Lack of response: SD = stable disease, PD - progressive disease.

Response criteria adapted from Durie et al (2006) [16].

^a – *p* value for U-Mann-Whitney test, ^b – *p* value for ROC analysis.

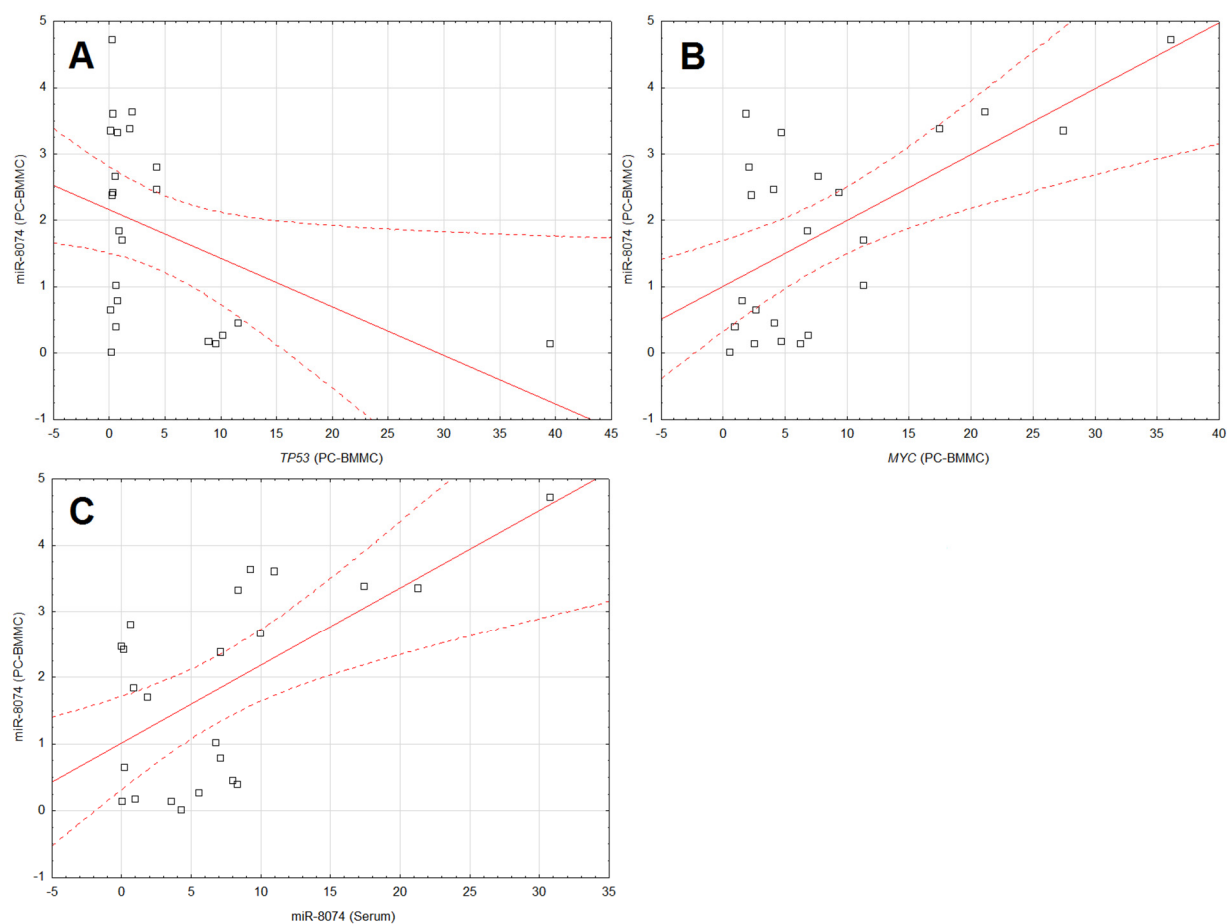


Figure S1. Scatter plots representing correlations between the expression of miRNA-8074, *TP53* gene [A] and *MYC* gene [B] in bone marrow plasma cells as well as with the expression of miRNA-8074 in blood serum [C].