

Supplementary table 1. Correlation between cytokines, their soluble receptors and age in MM patients.

	r	n	p-value
IL-6 (pg/ml)	-0.033	65	0.795
sIL-6R (ng/ml)	-0.047	65	0.708
VEGF (pg/ml)	0.080	65	0.526
sVEGF-R2 (pg/ml)	-0.208	65	0.096
HGF (pg/ml)	0.053	76	0.652
b-FGF (pg/ml)	-0.093	76	0.424
TGF- β_1 (ng/ml)	-0.057	76	0.628

b-FGF, b-fibroblast growth factor; HGF, hepatocyte growth factor; IL-6, interleukin-6; MM, multiple myeloma; sIL-6R, soluble IL-6 receptor; sVEGF-R2, soluble VEGF receptor; TGF- β_1 , transforming growth factor- β_1 ; VEGF, vascular endothelial growth factor;

Supplementary table 2. Adjusting studied parameters for age.

	Patients with MM		Healthy controls	
	age		age	
	r	p	r	p
Albumin (g/l)	0,07	p=0,55		
Alpha 1 globulin (%)	-0,04	p=0,75		
Alpha 2 globulin (%)	-0,03	p=0,83		
Beta globulin (%)	-0,04	p=0,72		
Gamma globulin (%)	-0,03	p=0,80		
Total Protein (g/l)	-0,17	p=0,18		
WBC (K/ μ l)	-0,18	p=0,14	0,18	p=0,37
RBC (M/ μ l)	0,09	p=0,46	-0,22	p=0,28
Hb (g/dl)	0,09	p=0,50	-0,20	p=0,31
Hct (%)	0,11	p=0,40	-0,20	p=0,32
PLT (K/ μ l)	-0,10	p=0,41	-0,21	p=0,29
Urea (mmol/l)	0,30	p=0,06	0,36	p=0,42
Creatinine (μ mol/l)	0,11	p=0,51	0,44	p=0,33
CRP (mg/l)	-0,04	p=0,88		
β_2 microglobulin (mg/l)	0,23	p=0,36		
Calcium (mmol/l)	0,11	p=0,47	-0,25	p=0,59
LDH (U/l)	-0,04	p=0,82	0,59	p=0,16
IL-6 (pg/ml)	-0,03	p=0,80	0,26	p=0,14
sIL-6R (ng/ml)	-0,05	p=0,71	-0,10	p=0,59
VEGF (pg/ml)	0,08	p=0,53	0,42	p=0,01
sVEGF-R2 (pg/ml)	-0,21	p=0,10	0,20	p=0,25
HGF (pg/ml)	0,05	p=0,65	0,37	p=0,03
b-FGF (pg/ml)	-0,09	p=0,42	-0,16	p=0,37
TGF- β_1 (ng/ml)	-0,06	p=0,63	0,20	p=0,25

b-FGF, b-fibroblast growth factor; Hb, hemoglobin; Hct, hematocrit; HGF, hepatocyte growth factor; IL-6, interleukin-6; LDH, lactate dehydrogenase; MM, multiple myeloma; NS, not significant; PLT, blood platelets; RBC, red blood cells; sIL-6R, soluble IL-6 receptor; sVEGF-R2, soluble VEGF receptor; TGF- β_1 , transforming growth factor- β_1 ; VEGF, vascular endothelial growth factor; WBC, white blood cells

Supplementary table 3. Analysis of correlation between the percentage of plasma cells in the bone marrow and the studied cytokines and soluble cytokine receptors in MM patients.

Cytokine	n	Pearson r	p
IL-6 (pg/ml)	31	-0,014	0,94
sIL-6R (ng/ml)	31	0,272	0,14
VEGF (pg/ml)	31	-0,591	0,001*
sVEGF-R2 (pg/ml)	31	-0,227	0,22
HGF (pg/ml)	37	0,125	0,46
b-FGF (pg/ml)	37	0,085	0,62
TGF- β_1 (ng/ml)	37	-0,347	0,04*

*-p<0.05

b-FGF, b-fibroblast growth factor; HGF, hepatocyte growth factor; IL-6, interleukin-6; MM, multiple myeloma; NS, not significant; SD, standard deviation; sIL-6R, soluble IL-6 receptor; sVEGF-R2, soluble VEGF receptor; TGF- β_1 ; transforming growth factor- β_1 ; VEGF, vascular endothelial growth factor