

**Table S1** Summary of plasma-cell neoplasia coexistence with MDS for 41 cases

No.	Author	Age (years)	Sex	Cytopenia	M protein	Bone	Dysplastic changes	Blast in BM	Plasma in BM	Diagnosis	AML transform	OS (months)
1	Mufti <i>et al.</i> , 1982	77	F	+	IgG-κ	-	Tri-lineage	12%	20%	MM/MDS-EB-2	+	9
2		73	M	-	IgM-κ	+	Tri-lineage	16%	20%	MM/MDS-EB-2	+	10
3		77	M	+	IgG-κ	+	Erythron/granulocyte	-	40%	MM/MDS-MLD	-	Alive
4		79	M	+	IgA-λ	+	Tri-lineage	7%	20%	MM/MDS-EB-1	-	3
5		69	M	+	IgG-λ	-	Tri-lineage	22%	37%	MM/MDS-EB-2	+	2
6	Copplestone <i>et al.</i> , 1986	76	F	+	IgG-κ	+	Tri-lineage	-	73%	MM/MDS-MLD	-	19
7		83	F	-	IgA-λ	-	Tri-lineage	3%	20%	SMM/MDS-MLD	-	Alive
8		89	F	+	IgG-κ	-	Tri-lineage	2%	10%	MM/MDS-MLD	-	Alive
9		66	M	+	IgG-κ	+	Megakaryocytic	-	5%	MM/MDS-SLD	-	7
10	Sato <i>et al.</i> , 1992	73	M	+	λ	+	Tri-lineage	-	9.7%	MM/MDS-RS-MLD	NA	NA
11	Florensa <i>et al.</i> , 1996	81	M	NA	IgG-κ	NA	NA	NA	NA	MM/MDS-SLD	NA	NA
12		79	F	NA	IgG-κ	NA	NA	NA	NA	MM/MDS-RS	NA	NA
13	Rios <i>et al.</i> , 2000	74	F	+	λ	-	Granulocyte/megakaryocytic	-	10%	MM/5q <sup>-</sup> MDS	-	48
14	Ortega <i>et al.</i> , 2013	72	F	+	IgA-λ	-	Megakaryocytic	NA	NA	MM/5q <sup>-</sup> MDS	NA	96
15	Li., 2014	75	M	+	IgA-κ	-	Erythron/granulocyte	6%	15.6%	MM/MDS-EB-1	-	8
16	Yoshida <i>et al.</i> , 2014	78	M	NA	IgG-λ	NA	NA	-	1.4%	MGUS/MDS-MLD	-	19.8
17		73	F	NA	IgG-λ	NA	NA	-	2.4%	MGUS/MDS-EB-2	+	7.3
18		73	M	NA	IgG-κ	NA	NA	-	0.4%	MGUS/MDS	-	Alive
19		82	M	NA	IgA-κ	NA	NA	-	2%	MGUS/MDS-MLD	-	Alive
20		71	F	NA	-	NA	NA	-	1.2%	MGUS/MDS-RS	+	52.8
21		77	M	NA	IgG-κ	NA	NA	-	1.8%	SMM/MDS-MLD	-	22.7
22		92	F	+	IgA-λ	NA	Tri-lineage	-	10.2%	SMM/MDS-MLD	-	Alive
23		72	M	NA	IgG-κ	NA	Tri-lineage	-	0.4%	MGUS/MDS-MLD	-	52
24		82	M	NA	-	NA	NA	-	-	MGUS/MDS	+	3
25		82	F	NA	-	NA	NA	-	4.8%	MGUS/MDS-SLD	-	Alive
26		72	M	NA	-	NA	NA	-	-	MGUS/MDS	-	84.6
27		77	M	NA	-	NA	NA	-	1.8%	SMM/MDS-MLD	-	71
28		82	F	NA	-	NA	NA	-	4%	SMM/MDS-MLD	-	19.9
29		80	M	NA	IgG-λ	NA	NA	-	8.6%	MGUS/MDS-SLD	-	1.8
30	Gu <i>et al.</i> , 2015	75	M	+	IgA-λ	+	Erythron series	-	12%	MM/MDS-SLD	+	4
31	Nanaji <i>et al.</i> , 2015	66	M	+	IgG-κ	-	Tri-lineage	-	16%	MM/5q <sup>-</sup> MDS	NA	NA
32	Zagaria <i>et al.</i> , 2015	73	F	NA	IgM-κ	-	Erythron/megakaryocytic	-	-	MGUS/5q <sup>-</sup> MDS	NA	NA
33	Quintini <i>et al.</i> , 2016	55	F	+	IgG-κ	-	Erythron/megakaryocytic	13%	20%	MM/MDS-EB-2	+	13
34	Nolte <i>et al.</i> , 2016	71	M	+	IgG-λ	NA	NA	NA	NA	MGUS/5q <sup>-</sup> MDS	+	60
35	Current, 2020	65	M	+	IgA-λ	-	Erythron series	6.8%	4%	MGUS/MDS-EB-1	-	3
36		67	M	+	λ	-	Erythron, granulocyte	1.2%	14.8%	MM/MDS-EB-1	+	4
37		54	M	+	λ	+	Granulocyte	1.2%	15.6%	MM/MDS-EB-1	-	15
38		56	M	+	κ	+	Granulocyte	0.8%	10%	MM/MDS-EB-1	-	10
39		64	M	+	IgA-κ	+	Erythron	3%	40%	MM/MDS-EB-1	-	Alive
40		47	F	+	IgG-λ	+	NA	1.0%	66.5%	MM/MDS-EB-1	-	Alive
41		63	M	+	IgG-κ	+	Granulocyte	7.8%	36%	MM/MDS-EB-1	-	4

MDS, myelodysplastic syndrome; MM, multiple myeloma; SMM, smoldering multiple myeloma; BM, bone marrow; AML, acute myelocytic leukemia; OS, overall survival; F, female; M, male; MM, multiple myeloma; MDS-EB, myelodysplastic syndrome with excess blasts; MDS-MLD, myelodysplastic syndromes with multilineage dysplasia; MDS-RS, myelodysplastic syndromes with ring sideroblasts; MDS-SLD, myelodysplastic syndromes with single lineage dysplasia; MGUS, monoclonal gammopathy of undetermined significance; NA, undescribed.