Clinical outcomes of WHO2022 and ICC MDS entities with risk stratification by IPSS-R and IPSS-M

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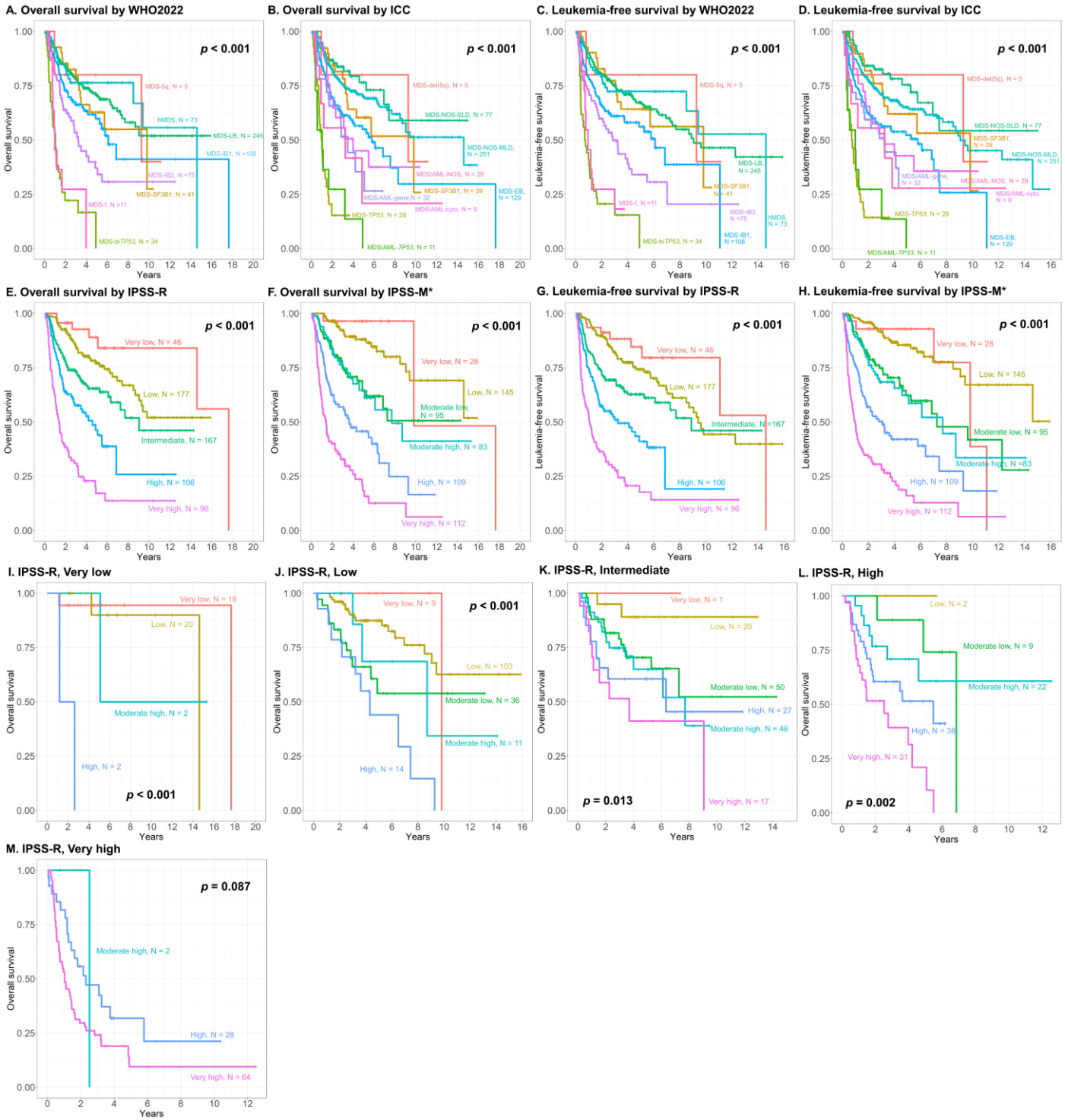
Supplementary Table S1. Multivariate survival analysis for overall survival in various MDS subgroups.

Subgroup	MDS-IB and MDS-F (WHO2022)		MDS-LB and hMDS (WHO2022)		MDS-NOS-SLD and MDS-NOS-MLD (ICC)		MDS/AML-gene, cyto, NOS (none *TP53* mutated) (ICC)		MDS-TP53 and MDS/AML-*TP53* (ICC)	
	HR (95% CI)	*P*	HR (95% CI)	*p*	HR (95% CI)	*p*	HR (95% CI)	*p*	HR (95% CI)	*p*
Sex (Female)	0.64 (0.39-1.06)	0.077	0.61 (0.96-0.95)	0.027	0.63 (0.40-0.99)	0.039	0.92 (0.40-2.11)	0.843	0.89 (0.41-1.93)	0.767
IPSS-M (per 1)	1.77 (1.45-2.16)	< 0.001	2.09 (1.74-2.50)	< 0.001	1.59 (1.71-2.46)	< 0.001	1.72 (1.16-2.54)	0.006	1.28 (0.66-2.48)	0.447
HSCT†	0.36 (0.23-0.56)	< 0.001	0.62 (0.39-0.97)	0.037	0.56 (0.37-0.95)	0.030	0.21 (0.09-0.45)	< 0.001	0.42 (0.19-0.93)	0.029
Subtype		0.677		0.415		0.582		0.371		0.693
IB1	1.0		LB 1.0		SLD 1.0		gene 1.0		MDS 1.0	
IB2	1.12 (0.69-1.85)	0.635	hypoplastic 1.24 (0.74-2.08)		MLD 1.17 (0.67-2.04)		cyto 2.08 (0.77-5.65)	0.149	MDS/AML 0.81 (0.29-2.29)	
F	1.44 (0.64-3.23)	0.373					NOS 1.38 (0.56-3.37)	0.484		

†This variable was treated as time-dependent variable.

MDS myelodysplastic neoplasm, WHO World Health Organization classification, ICC International Consensus Classification, MDS-SLD MDS with single-lineage dysplasia, MDS-MLD MDS with multilineage dysplasia, MDS-LB MDS with low blasts, hMDS MDS, hypoplastic, MDS-IB1 MDS with increased blasts-1, MDS-IB2 MDS with increased blasts-2, MDS-F MDS with increased blasts and fibrosis, NOS not otherwise specified, MDS-TP53 MDS with mutated *TP53*, MDS/AML-gene MDS/AML with myelodysplasia-related gene mutations, MDS/AML-cyto MDS/AML with myelodysplasia-related cytogenetic abnormalities. IPSS-M Molecular International Prognostic Scoring System, HSCT hematopoietic stem cell transplantation, HR hazard ratio, CI confidence interval

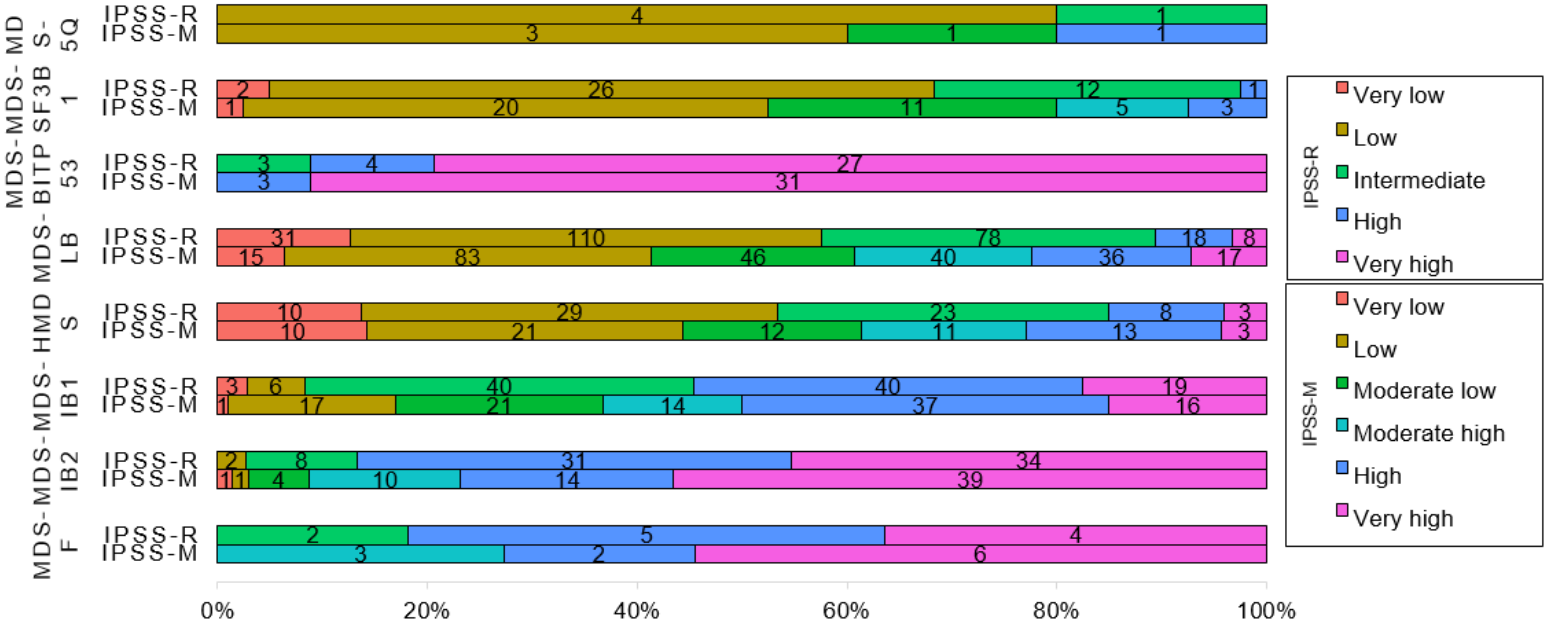
Supplementary Figure S1. Survival outcomes of myelodysplastic neoplasms according to WHO2022, ICC, IPSS-R, and IPSS-M classifications. (A–B) Overall survival stratified by WHO2022 and ICC. (C–D) Leukemia-free survival stratified by WHO2022 and ICC. (E–F) Overall survival stratified by IPSS-R and IPSS-M. (G–H) Leukemia-free survival stratified by IPSS-R and IPSS-M. (I–M) Overall survival by IPSS-M within each IPSS-R risk group.



*20 patients were excluded due to limited genetic information

ICC: The International Consensus classification, IPSS-M: Molecular International Prognostic Scoring System, IPSS-R: revised International Prognostic Scoring System, WHO2022: 2022 World Health Organization classification.

Supplementary Figure S2. The distribution of IPSS-R/IPSS-M risk categories across WHO2022 classifications



IPSS-M Molecular International Prognostic Scoring System, IPSS-R Revised International Prognostic Scoring System, MDS myelodysplastic neoplasm, MDS-5q MDS with low blasts and 5q deletion, MDS-SF3B1 MDS with low blasts and SF3B1 mutation, MDS-biTP53 MDS with biallelic TP53 inactivation, MDS-LB MDS with low blasts, hMDS MDS, hypoplastic, MDS-IB1 MDS with increased blasts-1, MDS-IB2 MDS with increased blasts-2, MDS-F MDS with increased blasts and fibrosis.