

SUPPLEMENTARY MATERIALS

Red Blood Cell Distribution Width May Predict Drug-induced Anemia and Prognosis in Patients Affected by Primary/Secondary Myelofibrosis Treated with Ruxolitinib

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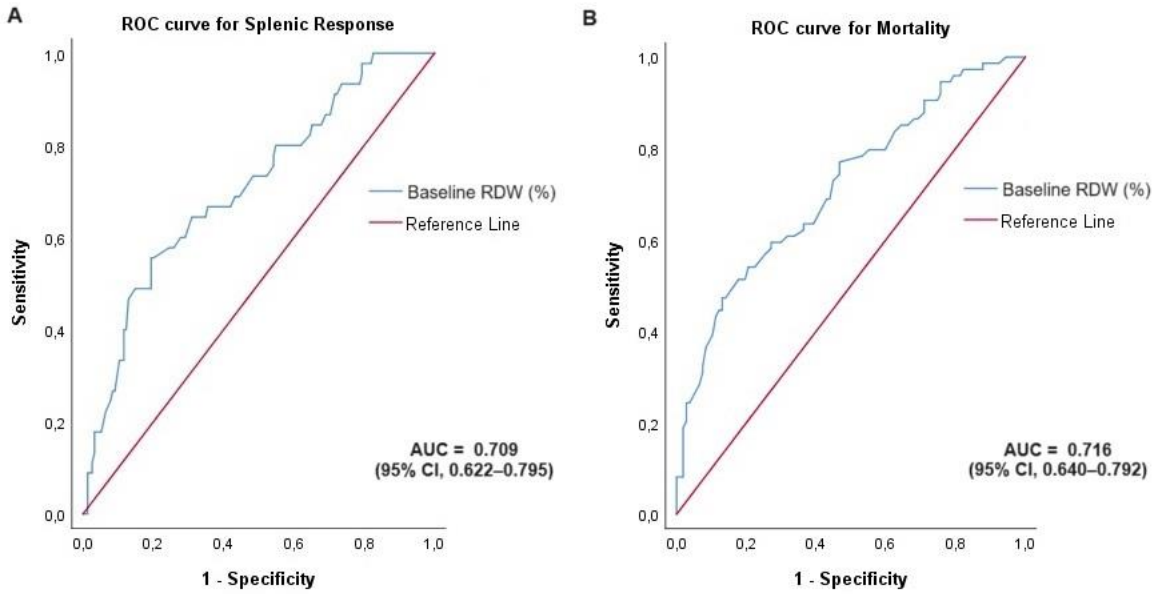
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Supplementary Figure 1. Receiver operating characteristic (ROC) analysis to assess baseline RDW (%) correlation with absence of splenic response (**A**) and with mortality (**B**). ROC curve for splenic response shows an area under the curve (AUC) of 0.709 (95% CI 0.622–0.795) (A). ROC curve for mortality shows an AUC of 0.716 (95% CI 0.640–0.792). A cutoff of 20.5% was pinpointed as the optimal cutoff-point in RDW values to dichotomize patients in both ROC analysis.

Characteristics		Univariate Analysis			Multivariate Analysis	
		Median OS (months) (95% CI)	HR (95% CI)	p Value	HR (95% CI)	p Value
Sex	Female	65.7 (42.3-89.1)	Ref	0.49	-	-
	Male	65.8 (51.9-79.7)	1.17 (0.74-1.86)			
MF Entity	SMF	84.2 (63.0-105.4)	Ref	0.049	Ref 1.30 (0.78-2.16)	0.32
	PMF	55.9 (49.4-63.4)	1.59 (1.00-2.52)			
Mutation Profile	JAK2 wild type	55.9 (45.4-66.4)	Ref	0.081	Ref 0.67 (0.41-1.10)	0.12
	JAK2 (V617F) mutated	79.0 (59.7-98.2)	0.65 (0.40-1.06)			
Therapy Line	Pre-Treated	64.8 (53.0-76.5)	Ref	0.65	-	-
	Untreated	65.8 (40.3-91.4)	0.90 (0.56-1.44)			
BM Fibrosis	Early-MF (grade I)	Not Reached	Ref	0.004	Ref 0.77 (0.24-2.48)	0.66
	Overt-MF (grade II-III)	58.4 (49.3-67.6)	4.48 (1.63-12.28)			
Baseline RDW As continuous variable		-	1.33 (1.21-1.46)	< 0.001	1.25 (1.12-1.40)	< 0.001
Baseline LDH	< 2xULN	102.3	Ref	0.002	Ref 1.59 (0.84-3.03)	0.16
	≥ 2xULN	56.1 (46.9-65.2)	2.53 (1.39-4.61)			
RBC requirement	No transfusions	79.0 (63.9-94.0)	Ref	< 0.001	Ref 0.62 (0.35-1.13)	0.12
	RBC transfusion dependent	34.6 (16.3-53.0)	2.40 (1.47-3.91)			
Baseline PLTs As continuous variable		-	0.998 (0.997-1.00)	0.016	0.998 (0.997-1.00)	0.009
DIPSS at RUX start	Int-1 Risk	102.3	Ref		Ref 3.12 (1.61-6.02) 8.11 (3.96-16.59)	0.001 < 0.001
	Int-2 Risk	55.9 (42.7-69.1)	4.53 (2.45-8.40)	< 0.001		
	High Risk	26.6 (23.7-29.5)	10.96 (5.59-21.50)	< 0.001		
RR6	Low Risk	Not Reached	Ref		Ref 1.24 (0.54-2.84) 1.79 (0.70-4.59)	0.61 0.23
	Int Risk	61.8 (51.4-72.2)	2.89 (1.37-6.11)	0.006		
	High Risk	34.6 (19.3-50.0)	6.57 (3.15-13.70)	< 0.001		

Supplementary Table 1. Univariate and Multivariate Analysis for factors' association with overall survival. RDW and PLTs were included as continuous variables. RUX, ruxolitinib; RDW, red cells distribution width; PMF, primary myelofibrosis; SMF, secondary myelofibrosis; PLTs, platelets; LDH, lactate dehydrogenase; DIPSS, the Dynamic International Prognostic Score System; RR6, response to ruxolitinib after 6 months; OS, overall survival; HR, hazard ratio; CI, confidence interval; ULN, upper normal limit; Int, intermediate; Ref, reference.