

Blast phase myeloproliferative neoplasm with prior exposure to ruxolitinib: comparative analysis of mutations and survival

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Supplementary table 1: Clinical and laboratory characteristics of 103 patients with myeloproliferative neoplasms with transformation into acute myeloid leukemia (AML; blast phase disease): variables collected at the time of leukemic transformation, stratified by exposure to ruxolitinib or other JAK2 inhibitor (JAKi).

Variables	All patients N=103	Exposed to Ruxolitinib N=32	Not exposed to Ruxolitinib or other JAKi N=71	P-value
Age at diagnosis in years; median (range)	70 (37-89)	70 (54-82)	68 (37-89)	0.6
Males, n (%)	54 (52)	20 (62)	34 (47.8)	0.16
Transfusion dependent; n (%) "N" evaluable = 101	52 (50.9)	23 (71.8)	29 (41)	0.0038
Hemoglobin g/dL; median (range) "N" evaluable = 101	8.9 (6-15.8)	8.9 (6.1-13.1)	8.9 (6-15.8)	0.55
Platelets $\times 10^9/L$; median (range) "N" evaluable = 101	60 (7-646)	58.5 (8-532)	65 (7-646)	0.37
Leukocytes $\times 10^9/L$; median (range) "N" evaluable = 101	14 (0.1-350)	14.7 (1.4-153.3)	13.8 (0.1-350)	0.86
Peripheral blood blast %; median (range) "N" evaluable = 101	26 (4-94)	27.5 (11-85)	26 (4-94)	0.38
Bone marrow blast %; median (range) "N" evaluable = 101	27 (5-95)	24.5 (5-80)	30 (5-95)	0.18
Karyotype: "N" evaluable = 97				0.34
Normal; n (%)	17 (17.5)	4 (14.2)	13 (18.8)	0.58
Complex karyotype, non-monosomal; n (%)	18 (18.5)	7 (25)	11 (15.9)	0.3
Monosomal Karyotype or monosomy7; n (%)	35 (36)	7 (27)	28 (40.5)	0.14
Other; n (%)	27 (27.8)	10 (35)	17 (24.6)	0.27
Driver mutation:				0.65
<i>JAK2</i> ; n (%)	69 (67)	24 (75)	45 (63)	
<i>MPL</i> ; n (%)	6 (5.8)	2 (6)	4 (5)	
<i>CALR</i> ; n (%)	7 (6.7)	2 (6)	5 (7)	

Triple-negative; n (%)	1 (0.9)	0 (0)	1 (1.4)	
JAK2 wild-type but <i>CALR/MPL</i> not evaluated; n (%)	20 (19.4)	4 (12.5)	16 (22.5)	
Somatic mutations: "N" evaluable = 96; n (%) {seen in 7 or more patients)	43 (41)	11 (34)	32 (45)	0.3
<i>ASXL1</i>	17 (39.5)	3 (9)	14 (19.7)	0.17
<i>TP53</i>	14 (32.5)	3 (9)	11 (15.4)	0.38
<i>TET2</i>	8 (18)	1 (3)	7 (9.8)	0.2
<i>FLT3</i>	8 (18)	1 (3)	7 (9.8)	0.2
<i>SRSF2</i>	7 (16)	5 (15.6)	2 (2.8)	0.02
<i>EZH2</i>	7 (16)	2 (6)	5 (7)	0.88
MPN subtype: "N" evaluable = 99				<0.01
Post-PV/ET* AML without myelofibrosis; n (%)	37 (37.3)	1 (3)	36 (51)	
Post-PV/ET AML with myelofibrosis; n (%)	27 (27.2)	10 (34)	17 (24)	
Post-PMF** AML; n (%)	35 (35.3)	18 (62)	17 (24)	
Constitutional symptoms; n (%) "N" evaluable = 100	92 (89)	30 (93)	62 (91)	0.65
Palpable splenomegaly: "N" evaluable = 98				<0.01
Mild <10 below LCM; n (%)	29 (29.5)	2 (6)	27 (40)	
Moderate 10-20 cm below LCM; n (%)	27 (27.5)	8 (25.8)	19 (28)	
Marked >20 cm below LCM; n (%)	33 (33.6)	17 (54.8)	16 (23.8)	
Splenectomy; n (%)	9 (9.1)	4 (12.9)	5 (7)	
Duration of treatment before AML in months; median (range): "N" evaluable = 98	60 (1-396)	47 (2-384)	65.5 (1-396)	0.06