SUPPLEMENTARY APPENDIX

Distinct clinical characteristics of myeloproliferative neoplasms with calreticulin mutations

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<u>Supplementary Table 1.</u> Clinical and laboratory characteristics of MPN patients (ET and PMF combined) according to CALR mutation type

	(A) Type 1 (n=64)	**(B) Type 2** (n=34)	**(C) Other** (n=23)	**p (A) vs (B) vs. (C)**	**p (A) vs (B)**	**p (B) vs (A+C)**
Age, year (25-75 percentile)	53 (36-63)	60 (43-73)	50 (46-68)	0.153	0.058	0.066
Male/female (%/%)	31/33 (48%/52%)	14/20 (41%/59%)	6/17 (26%/74%)	0.175	0.529	1.0
ET/PMF (%/%)	48/16 (75%/25%)	31/3 (91%/9%)	17/6 (74%/26%)	0.132	0.064	**0.049**
Hb (g/L, 25-75 percentile)	125 (115-141)	133 (123-141)	123 (113-134)	0.378	0.305	0.184
WBC (10^9/L, 25-75 percentile)	10 (8-13)	9 (7-11)	9 (7-13)	0.406	0.224	0.323
PLT (10^9/L, 25-75 percentile)	847 (676-1094)	1224 (792-1455)	753 (651-1102)	**0.027**	**0.022**	**0.03**
Splenomegaly, n (%)	22/53 (42%)	4/23 (17%)	8/19 (42%)	0.107	0.064	**0.046**
Venous thrombosis, n (%)	5/59 (8%)	0/28 (0%)	2/19 (11%)	0.248	0.171	0.186
Arterial thrombosis, n (%)	5/59 (8%)	3/28 (11%)	2/19 (11%)	0.931	0.709	0.722
Haemorrhage, n (%)	2/59 (3%)	2/28 (7%)	0/19 (0%)	0.439	0.591	0.284
Coagulation complications, n (%)	12/59 (20%)	4/28 (14%)	2/19 (11%)	0.555	0.568	0.775
AL-transfor-mation, n (%)	4/61 (7%)	2/29 (7%)	0/20 (0%)	0.493	1.00	0.653
Cytoreduction, n (%)	37/54 (69%)	23/27 (85%)	11/18 (61%)	0.158	0.178	0.083

<u>Supplementary Table 2.</u> Clinical and laboratory characteristics of ET patients according to CALR mutation type

	(A) Type 1 (n=48)	**(B) Type 2** (n=31)	**(C) Other** (n=17)	**p (A) vs (B) vs. (C)**	**p (A) vs (B)**	**p (B) vs (A+C)**
Age, year (25-75 percentile)	51 (35-62)	59 (41-74)	50 (46-74)	0.166	0.061	0.092
Male/female (%/%)	21/27 (44%/56%)	13/18 (42%/58%)	5/12 (29%/71%)	0.576	1.0	1.0
Hb (g/L, 25-75 percentile)	131 (120-144)	134 (125-142)	126 (114-137)	0.544	0.899	0.587
WBC (10^9/L, 25-75 percentile)	10 (9-12)	9 (7-11)	9 (7-13)	0.593	0.308	0.354
PLT (10^9/L, 25-75 percentile)	946 (764-1280)	1237 (884-1472)	830 (721-1203)	0.095	0.081	**0.041**
Splenomegaly, n (%)	12/39 (31%)	4/21 (19%)	4/14 (29%)	0.615	0.377	0.396
Venous thrombosis, n (%)	4/45 (9%)	0/26 (0%)	2/14 (14%)	0.190	0.289	0.171
Arterial thrombosis, n (%)	3/45 (7%)	3/26 (11%)	2/14 (14%)	0.629	0.662	0.696
Haemorrhage, n (%)	2/45 (4%)	2/26 (8%)	0/14 (0%)	0.545	0.620	0.583
Coagulation complications, n (%)	9/45 (20%)	4/26 (15%)	2/14 (14%)	0.830	0.756	1.0
MF-transfor-mation, n (%)	8/45 (18%)	4/27 (15%)	1/15 (7%)	0.579	1.0	1.0
AL-transfor-mation, n (%)	1/46 (2%)	2/27 (7%)	0/15 (0%)	0.358	0.551	0.222
Cytoreduction, n (%)	28/42 (67%)	23/26 (89%)	11/14 (79%)	0.121	**0.050**	0.097

Type 1*CALR* mutation (52 basepair deletion, c.1092_1143del) is the commonest, type 2 (5 basepair insertion, c.1154_1155insTTGTC) is the second most frequent CALR mutation. Types other than 1/2 CALR mutations are grouped in the category called "other" in column C. Clinical and laboratory data apply at the time of first presentation. Cytoreduction was defined positive if hydroxyurea or anagrelid treatments occurred for more than 6 months. P values ≤ 0.05 are indicated by boldface character.

Abbreviations: AL: acute leukaemia; ET: essential thrombocythaemia; Hb: haemoglobin concentration; MF: myelofibrotic, PLT: platelet count; PMF: primary myelofibrosis, WBC: white blood cell count.