

**Supplementary Table 3:** Demographic and clinical characteristics of enrolled patients depending on the COVID-19 severity.

	Asymptomatic		Mild infection		Severe infection		Critical infection		Unknown	
	n	%	n	%	n	%	n	%	n	%
<b>Sex</b>										
Female	304	45.0%	297	45.1%	689	39.7%	275	39.9%	14	32.6%
Male	371	55.0%	361	54.9%	1047	60.3%	414	60.1%	29	67.4%
<b>Age, median (IQR) [range]</b>	61 (48 - 70), [18 - 93]		63 (51 - 74), [18 - 95]		69 (57 - 77), [18 - 94]		64 (55 - 72), [18 - 92]		59 (48 - 72), [22 - 87]	
<b>Ethnic origin</b>										
American Indian/Alaska Native	0	0.0%	0	0.0%	2	0.1%	0	0.0%	0	0.0%
Asian	12	1.8%	6	0.9%	51	2.9%	14	2.0%	0	0.0%
Black/African American	5	0.7%	4	0.6%	19	1.1%	4	0.6%	1	2.3%
Pacific Islander/Native Hawaiian	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
White	627	92.9%	586	89.1%	1476	85.0%	563	81.7%	32	74.4%
Unknown	31	4.6%	62	9.4%	188	10.8%	108	15.6%	10	23.3%
<b>Comorbidities °</b>										
Chronic cardiopathy	154	22.8%	174	26.4%	583	33.6%	224	32.5%	11	25.6%
Chronic pulmonary disease	51	7.6%	79	12.0%	343	19.8%	135	19.6%	6	14.0%
Diabetes mellitus	94	13.9%	94	14.3%	314	18.1%	115	16.7%	3	7.0%
Liver disease	23	3.4%	23	3.5%	84	4.8%	36	5.2%	1	2.3%
Obesity	65	9.6%	49	7.4%	139	8.0%	88	12.8%	4	9.3%
Renal impairment	43	6.4%	53	8.1%	164	9.4%	61	8.9%	4	9.3%
Smoking history	87	12.9%	74	11.2%	215	12.4%	98	14.2%	3	7.0%
No risk factor identified	321	47.6%	290	44.1%	601	34.6%	233	33.8%	18	41.9%
<b>Underlying malignancy</b>										
Leukemia	262	38.8%	258	39.2%	746	43.0%	318	46.2%	19	44.2%
Acute lymphoid leukemia	47	7.0%	31	4.7%	50	2.9%	39	5.7%	2	4.7%
Chronic lymphoid leukemia	45	6.7%	66	10.0%	263	15.1%	97	14.1%	3	7.0%
Acute myeloid leukemia	105	15.6%	80	12.2%	188	10.8%	120	17.4%	4	9.3%
Chronic myeloid leukemia	29	4.3%	32	4.9%	77	4.4%	17	2.5%	6	14.0%
Myelodysplastic syndrome	35	5.2%	48	7.3%	157	9.0%	36	5.2%	3	7.0%
<i>Low - intermediate risk</i>	14	2.1%	26	4.0%	85	4.9%	12	1.7%	1	2.3%
<i>High risk</i>	6	0.9%	5	0.8%	29	1.7%	8	1.2%	0	0.0%

	Asymptomatic		Mild infection		Severe infection		Critical infection		Unknown	
	n	%	n	%	n	%	n	%	n	%
<i>Not stated</i>	15	2.2%	17	2.6%	43	2.5%	16	2.3%	2	4.7%
Hairy cell leukemia	1	0.1%	1	0.2%	11	0.6%	9	1.3%	1	2.3%
Lymphoma	238	35.3%	228	34.7%	528	30.4%	211	30.6%	14	32.6%
Hodgkin lymphoma	39	5.8%	30	4.6%	50	2.9%	11	1.6%	5	11.6%
Non-Hodgkin lymphoma	199	29.5%	198	30.1%	478	27.5%	200	29.0%	9	20.9%
<i>Indolent</i>	64	9.5%	84	12.8%	244	14.1%	103	14.9%	2	4.7%
<i>Aggressive</i>	120	17.8%	103	15.7%	209	12.0%	80	11.6%	4	9.3%
<i>Not stated</i>	15	2.2%	11	1.7%	25	1.4%	17	2.5%	3	7.0%
PH negative myeloproliferative diseases	39	5.8%	59	9.0%	125	7.2%	38	5.5%	6	14.0%
Essential thrombocythemia	12	1.8%	16	2.4%	32	1.8%	5	0.7%	4	9.3%
Myelofibrosis	15	2.2%	22	3.3%	63	3.6%	21	3.0%	1	2.3%
Polycythemia vera	10	1.5%	21	3.2%	27	1.6%	11	1.6%	1	2.3%
Systemic mastocytosis	2	0.3%	0	0.0%	3	0.2%	1	0.1%	0	0.0%
Plasma cell disorders	133	19.7%	105	16.0%	331	19.1%	120	17.4%	3	7.0%
Multiple myeloma	131	19.4%	101	15.3%	330	19.0%	119	17.3%	3	7.0%
Amyloid light-chain amyloidosis	2	0.3%	4	0.6%	1	0.1%	1	0.1%	0	0.0%
Other hematological malignancies	3	0.4%	8	1.2%	6	0.3%	2	0.3%	1	2.3%
Aplastic anemia	3	0.4%	8	1.2%	6	0.3%	2	0.3%	1	2.3%
<b>Last/ongoing treatment strategy before COVID-19</b>										
Anagrelide/Hydroxyurea	21	3.1%	30	4.6%	69	4.0%	22	3.2%	3	7.0%
Conventional chemotherapy	139	20.6%	110	16.7%	198	11.4%	121	17.6%	4	9.3%
Demethylating agents	19	2.8%	21	3.2%	72	4.1%	28	4.1%	1	2.3%
Immunotherapy only	21	3.1%	25	3.8%	54	3.1%	23	3.3%	2	4.7%
Immunochemotherapy	149	22.1%	145	22.0%	383	22.1%	171	24.8%	9	20.9%
IMiDs	37	5.5%	32	4.9%	114	6.6%	35	5.1%	0	0.0%
Targeted therapy	105	15.6%	103	15.7%	291	16.8%	100	14.5%	8	18.6%
Palliative	26	3.9%	21	3.2%	68	3.9%	36	5.2%	0	0.0%
Maintenance	4	0.6%	5	0.8%	11	0.6%	4	0.6%	1	2.3%
Other	6	0.9%	5	0.8%	9	0.5%	8	1.2%	0	0.0%
HSCT - Allogeneic	44	6.5%	33	5.0%	66	3.8%	29	4.2%	1	2.3%

	<b>Asymptomatic</b>		<b>Mild infection</b>		<b>Severe infection</b>		<b>Critical infection</b>		<b>Unknown</b>	
	n	%	n	%	n	%	n	%	n	%
HSCT - Autologous	23	3.4%	16	2.4%	21	1.2%	14	2.0%	0	0.0%
CAR-T	2	0.3%	3	0.5%	8	0.5%	7	1.0%	1	2.3%
Radiotherapy	1	0.1%	0	0.0%	6	0.3%	2	0.3%	1	2.3%
Unknown	12	1.8%	9	1.4%	15	0.9%	5	0.7%	0	0.0%
No treatment	61	9.0%	81	12.3%	303	17.5%	83	12.0%	10	23.3%
Supportive measures	5	0.7%	19	2.9%	48	2.8%	1	0.1%	2	4.7%
<b>Overall mortality</b>	104	15.4%	110	16.7%	526	30.3%	438	63.6%	7	16.3%
Reason for death <sup>°</sup>										
Not related to COVID-19	36	5.3%	32	4.9%	73	4.2%	46	6.7%	0	0.0%
Contributable by COVID-19	26	3.9%	17	2.6%	54	3.1%	55	8.0%	3	7.0%
Attributable to COVID-19	42	6.2%	61	9.3%	399	23.0%	337	48.9%	4	9.3%
Attributable to hematological malignancy	51	7.6%	40	6.1%	136	7.8%	100	14.5%	1	2.3%
Death due to other reasons	11	1.6%	12	1.8%	56	3.2%	40	5.8%	1	2.3%
Death due to unknown reasons	7	1.0%	8	1.2%	24	1.4%	33	4.8%	0	0.0%

<sup>°</sup> Data can be super additive; <sup>^</sup> Data not available in all patients.

**HSCT:** haematopoietic stem cell transplantation; **CAR-T:** chimeric antigen receptor T-cell therapies.