

Supplementary Table 1:

a)

UPN	Age	Sex	WCC ( $\times 10^9/L$ )	Disease phase
CML264	61	M	NK	Chronic
CML194	40	F	150	Chronic
CML109	56	F	NK	Chronic
CML259	NK	NK	NK	Chronic
CML110	46	F	NK	Chronic
CML111	35	F	NK	Chronic
CML373	42	F	382	Chronic
CML339	26	F	295	Chronic
CML294	38	F	294	Chronic
CML273	50	F	308	Chronic
CML340	NK	NK	NK	Chronic
CML341	48	M	231	Chronic
CML332	54	F	132	Chronic
CML343	39	M	48	Chronic
CML347	27	F	386	Chronic
CML112	32	M	>100	Accelerated
CML185	46	M	>100	Accelerated
CML239	62	M	NK	Accelerated
CML415	71	F	135	Accelerated
CML001	NK	F	NK	Myeloid Blast
CML002	65	M	NK	Myeloid Blast
CML371	40	M	51	Myeloid Blast
COL091	78	M	NK	Myeloid Blast
COL091R	78	M	NK	Myeloid Blast
HER002	65	F	NK	Myeloid Blast
LIV1723	36	F	NK	Myeloid Blast
LIV1724	33	M	NK	Myeloid Blast
LIV2616	43	F	NK	Myeloid Blast
LIV2225	65	F	NK	Myeloid Blast
LIV2397	42	M	NK	Myeloid Blast

b)

Patient	Karyotype
COL091	46, XY t(9;22) (q34;q11), del(16) (q22q23) [8], 46, XY t(9;22) (q34;q11), del(16) (q22q23), i(17) (?q10) [2]
COL091R	46, XY t(9;22) (q34;q11), del(16) (q22), i(17) (q10) [4]
CML371	46, XY t(9;22) (q34;q11) [39] /46,idem,del(7)(p11)[5]/46,XY[6]
CML002	46, XY, t(9;22) (q34;q11)[15] 46, idem, del(17)(p1?3) [15]

**Supplementary Table 1:** a) Patients characteristics, b) Detailed cytogenetic analysis for the indicated patients obtained at diagnosis of BP-CML.

## **Models of leukemic cell haemopoiesis in Myeloid BP-CML and AML.**

Left, representation of the normal hemopoietic hierarchy. HSC, hemopoietic stem cell; MPP, multi-potent progenitor; LMPP, lymphoid-primed multi-potential progenitor; CMP; common myeloid progenitor; GMP, granulocyte-macrophage progenitor; MEP, megakaryocyte-erythroid progenitor. Right, models of hemopoiesis in CD34+ progenitor AML where LMPP-like and GMP-like progenitors have been described<sup>1</sup>; myeloid BP-CML (described here) and CD34- precursor AML<sup>2</sup>. Pre-L HSC, pre-leukemic stem cells: CML-CP-SC, CML chronic phase stem cell; LSC, leukemic stem cells.

## **References**

1. Goardon N, Marchi E, Atzberger A, et al. Coexistence of LMPP-like and GMP-like leukemia stem cells in acute myeloid leukemia. *Cancer Cell*. 2011;19(1):138-152.
2. Quek L, Otto GW, Garnett C, et al. Genetically distinct leukemic stem cells in human CD34- acute myeloid leukemia are arrested at a hemopoietic precursor-like stage. *Journal of Experimental Medicine*. 2016;Jul 4. pii: jem.20151775. [Epub ahead of print].