Supplemental Figures and Table – Krause et al.

Table S1. Quantitation of engrafting proviral clones

Figure 2B										**mean**	**S.D.**
L-sel KO donor/WT recips	lane 5	lane 6	lane 7	lane 9	lane 10	lane 11					
# clones	1	1	2	1	1	1				1.17	0.41
WT donor/P-sel KO recips	lane 12	lane 13	lane 14								
# clones	12	6	10							9.33	3.06
PSGL-1 KO donor/WT recips	lane 15	lane 16	lane 17								
# clones	2	1	2							1.67	0.58
WT donor/VCAM1 KO recips	lane 20	lane 21	lane 22								
# clones	12	9	11							10.67	1.53
WT donor/WT recips	lane 3	lane 4	lane 2 (Fig 3B)	lane 3 (Fig 3B)	lane 3 (Fig 4F)	lane 4 (Fig 4F)					
# clones	4	4	4	6	6	3				4.50	1.22
Figure 3C											
E-sel KO recips IV	lane 7	lane 8	lane 9	lane 10	lane 11	lane 12	lane 13				
# clones	1	1	2	4	3	1	1			1.86	1.21
E-sel KO recip IF	lane 14	lane 15	lane 16	lane 17	lane 18	lane 19					
# clones	5	5	2	4	2	8				4.33	2.25
Figure 4C											
WT donors	lane 2	lane 3	lane 4	lane 5	lane 7	lane 8	lane 9	lane 10	lane 11		
# clones	2	4	5	1	3	2	1	2	4	2.67	1.41
PSGL-1/CD44 DKO donors	lane 12	lane 13	lane 14	lane 15	lane 16						
# clones	1	1	2	1	1					1.20	0.45
Figure 4F											
Core2 KO donors	lane 5	lane 6	lane 7	lane 8							
# clones	1	2	2	3						2.00	0.82
FucT IV/VII KO donors	lane 9	lane 10	lane 11	lane 12							
# clones	1	2	1	3						1.75	0.96
Figure 5B											
0 mu/mL NA	lane 2	lane 3	lane 4	lane 5	lane 6						
# clones	4	2	6	3	7					4.40	2.07
12.5 mU/mL NA	lane 11	lane 12	lane 13	lane 14	lane 15						
# clones	2	3	2	2	1					2.00	0.71
Figure 6E											
L-sel KO donors +E/L-sel	lane 9	lane 11	lane 13	lane 15	lane 16	lane 17	lane 18				
# clones	2	3	10	2	5	2	8			4.57	3.26
Figure 7B											
MIG – WT donor	lane 2	lane 3	lane 4								
# clones	13	11	7							10.33	3.06
MIG – L-selectin KO donor	lane 5	lane 6	lane 7								
# clones	14	7	8							9.67	3.79
Figure 7C											
no Ab	lane 2	lane 3	lane 4								
# clones	9	9	7							8.33	1.15
isotype Ab	lane 5	lane 6	lane 7								
# clones	9	8	8							8.33	0.58
anti-L-selectin Ab	lane 8	lane 9	lane 10	lane 11	lane 12						
#clones	3	2	5	5	4					3.80	1.30

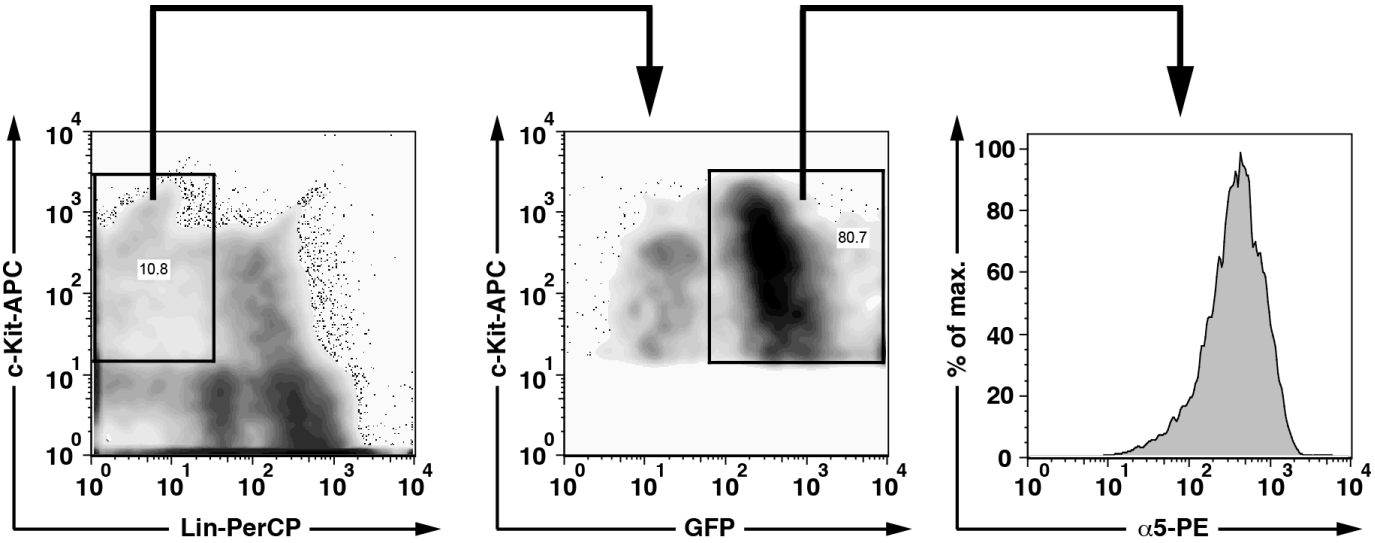

Figure S1. Assessment of adhesion molecule expression on *BCR-ABL1*$^+$ stem/progenitor cells from leukemic mice. Gating of a representative BM sample from a mouse with *BCR-ABL1*-induced CML-like MPN is illustrated. Lineage negative (Lin$^-$) cells expressing c-Kit were predominantly (>80%) GFP$^+$, and this subset expressed uniformly high levels of α5 integrin.

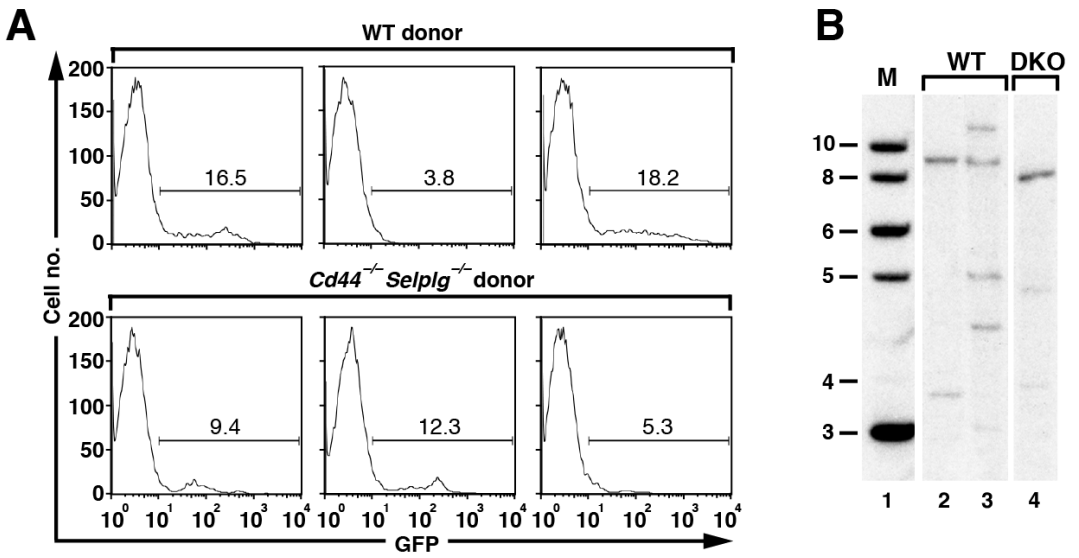

Figure S2. Deficiency of CD44 and PSGL-1 does not significantly impair engraftment of non-BCR-ABL1-expressing stem cells. (A) Levels of GFP^+ BM engraftment of WT recipients of WT (top panels) or CD44/PSGL-1 double knockout (bottom panels) HSC transduced with empty GFP retrovirus, assessed 2 mo post-transplantation. (B) Assessment of proviral engraftment in evaluable (with >10% GFP^+ BM cells) recipients from panel A. Recipients of transduced WT donor HSC had 2 and 5 proviral clones (lanes 2 and 3, respectively), while the only evaluable recipient of CD44/PSGL-1 double knockout (DKO) HSC had 3 proviral clones (lane 4). Lane 1 is a ladder of DNA molecular mass markers.

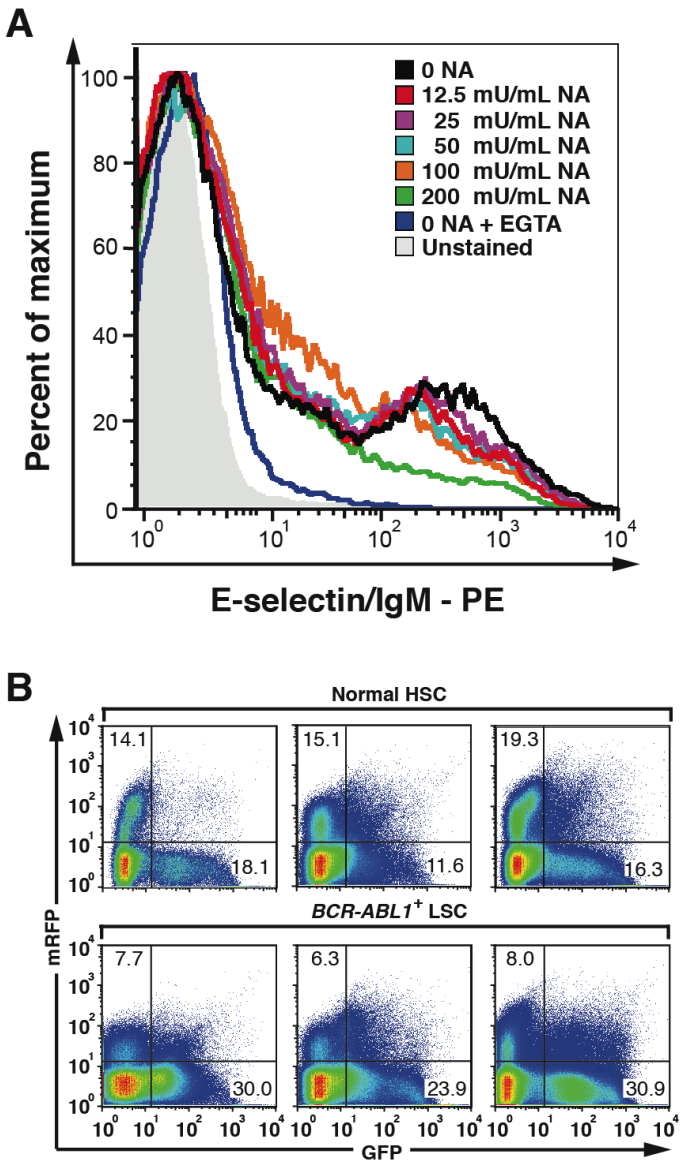

Figure S3. Destruction of selectin ligands by neuraminidase impairs engraftment of *BCR-ABL1*$^+$ leukemic stem cells. (A) Flow cytometric analysis of expression levels of E-selectin ligands on Lin$^-$Kit$^+$ BM stem/progenitor cells following treatment with varying concentrations of neuraminidase (NA), assessed by staining with an E-selectin/IgM fusion protein. The profile of unstained cells is shown by the gray histogram, untreated cells by the black line, and untreated cells in the presence of EGTA (which abolishes selectin-ligand interactions) by the blue line. (B) Representative flow cytometric plots of mRFP and GFP expression in BM myeloid (Mac-1$^+$) cells from recipients of NA-treated BM transduced with parental (top row) or *BCR-ABL1*-expressing (bottom row) retroviruses. The percentage of mRFP$^+$ and GFP$^+$ cells is indicated in each quadrant.