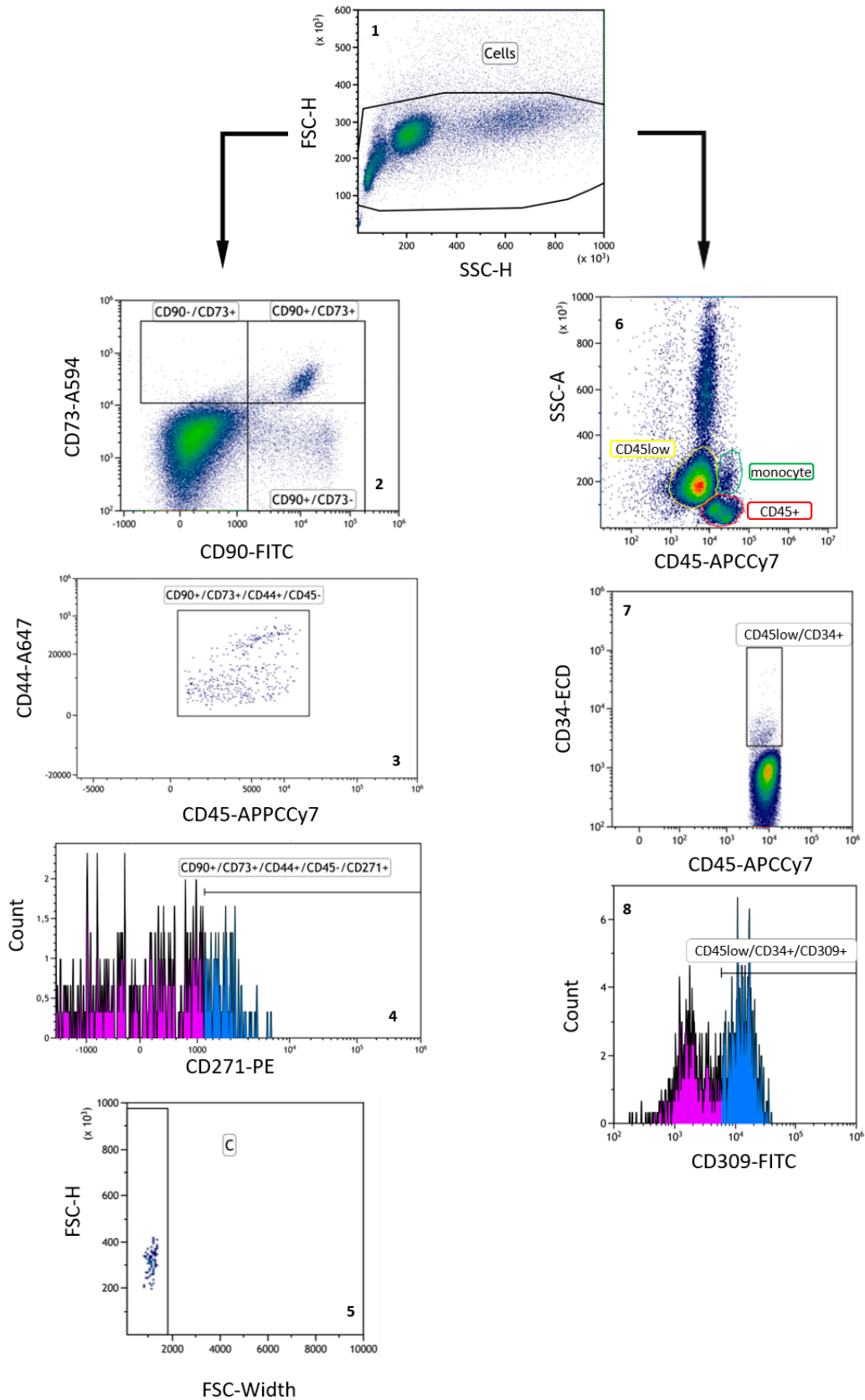


**Figure S1:** Representation of the experimental design. S = Surgery. Systemic injections of G-CSF and placebo are represented by ▲. The crosses indicate the dates when the different analyses were performed.



**Figure S2.** Representative flow cytometry gating strategy for each cell types depending on their immunophenotypic profile. Plot 2 to 5 represent the MSC gating, with plot 4 for MSC CD271+. Then, plot 7 represent the HSPC population and the plot 8 the EPCs cell type.

**Table S1.** Flow cytometry markers.

<b>Cell type</b>	<b>Surface Markers</b>	<b>Comment</b>	<b>Dosage</b>
HSPC	CD34+	Hematopoietic maker	10 $\mu$ L no dilution
	CD45 <sup>low</sup>	Leukocyte marker	2 $\mu$ L no dilution
EPC	CD34+	Hematopoietic marker	10 $\mu$ L no dilution
	CD45 <sup>low</sup>	Leukocyte marker	2 $\mu$ L no dilution
	CD309+	Endothelial marker	2 $\mu$ L no dilution
MSC	CD44+	Express by most mammalian cells	3 $\mu$ L diluted 20 times
	CD73+	Mesenchymal marker	4 $\mu$ L no dilution
	CD90+	Mesenchymal marker	2 $\mu$ L no dilution
	CD271+	Marker associated with stemness of MSC	4 $\mu$ L no dilution
	CD45-	Leukocyte marker	2 $\mu$ L no dilution